



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

### Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

### About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

HOME CARE  
OF  
CONSUMPTIVES

ROY L. FRENCH



LANE MEDICAL LIBRARY STANFORD  
L3113 .F87 1918  
Home care of consumptives / by Roy L. Fr



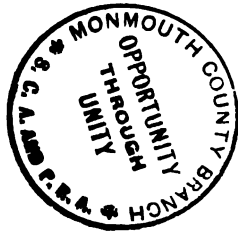
24503406349

**LANE**



Gift of:

Social Service Department









# HOME CARE OF CONSUMPTIVES

**BY**

ROY L. FRENCH, M.A.

**FORMER SECRETARY, KENTUCKY TUBERCULOSIS COMMISSION**

**WITH 27 ILLUSTRATIONS**

**G. P. PUTNAM'S SONS**  
NEW YORK AND LONDON  
**The Knickerbocker Press**

## 1916

7

Figure 1 consists of two scatter plots. The left plot shows a positive correlation between the number of children in the household (x-axis) and the number of children in the family (y-axis). A regression line is drawn through the data points. The right plot shows a similar positive correlation, but with a shaded area representing the confidence interval around the regression line.



**COPYRIGHT, 1916**  
**BY**  
**ROY L. FRENCH**

**The Knickerbocker Press, New York**

1916

F87  
1916

## PREFACE

THE author of this book, a social worker, has been engaged for four years in educational and executive work in the campaign against tuberculosis. In connection with this work he has visited many hospitals, clinics, and open-air schools, and has often accompanied visiting nurses on their rounds, thus coming in personal contact with some hundreds of families suffering from tuberculosis. In addition, he has had the disease within his own home circle. These are his qualifications for the writing of this manual.

The scientist, in preparing a book like this, is likely to search first for the truth, with secondary consideration of its usefulness to his readers. The social worker, on the other hand, asks himself, "For what helpful information will people turn to this book?" Then, as the author has done, he searches out and sets down that information in the simplest possible form. Therefore, in addition to the patients for whom it is primarily written,

iii

78486

this book, with its range of helpful facts, should be of service to tuberculosis workers and visiting nurses, and to teachers, ministers, and clubs interested in the health problems of their localities. Also, those doctors who realize most keenly the necessity of the patient's intelligent co-operation in the details of treatment, will benefit by placing this book in the hands of the family.

The thanks of the author are due to many persons for aid of various kinds in the preparation of his work, but particularly to the following:

The Kentucky Tuberculosis Commission, for permission to use material from their *Home Care of Tuberculosis*, prepared for them by the author for general distribution in Kentucky; to Miss Fannie C. Rawson of the Kentucky Library Commission, for help in making up the bibliography; to Dr. Charles L. Minor, for permission to reprint his "Hints and Helps"; to the *Journal of the Outdoor Life* and the National Tuberculosis Association for information secured from their files; to the manufacturers of various supplies, for illustrations; to Miss Laura Cauble, for permission to reprint from the Kentucky

## Preface

v

publication her chapter on diet; to Mr. Anthony Fiala, for an extended quotation from his article, "A Matter of Clothes," and his reading of the section on clothing; and to the following persons who have read and criticized the entire manuscript: Miss Chloe Jackson, R. N., Executive Nurse, Raoul Foundation, Atlanta, Georgia; Miss Harriet Fulmer, R. N., Extension Secretary, Illinois Tuberculosis Association, Chicago; Dr. John Risk Meek, Physician in Charge, Kenton County Tuberculosis Clinic, Covington, Ky.; Dr. Dunning S. Wilson, Head Physician, Waverly Hills Tuberculosis Hospital, Louisville, Ky.; Dr. Philip P. Jacobs, Assistant Secretary, National Tuberculosis Association, New York City; Dr. Alfred Meyer, Consulting Physician, Montefiore Home Country Sanitarium, New York; Dr. Theodore B. Sachs, President, National Tuberculosis Association, Chicago.

R. L. F.

NEW YORK, May, 1916.



## CONTENTS

CHAPTER	PAGE
I.—WHOM WILL THIS BOOK SERVE? .	I
II.—WHAT ARE THE CONSUMPTIVE'S CHANCES? . . . . .	3
III.—WHAT IS TUBERCULOSIS? THE SOIL AND THE SEED. SYMP- TOMS. INFECTION AND DIS- EASE. HEMORRHAGES. PRE- DISPOSITION, RESISTANCE, AND IMMUNITY. SPECIAL RISKS OF CHILDREN . . . . .	8
IV.—JUST AFTER THE DIAGNOSIS .	18
V.—FUNCTION OF SANATORIA AND HOSPITALS . . . . .	23
VI.—PATIENT AND PHYSICIAN .	25
VII.—MEDICINES IN TUBERCULOSIS .	30
VIII.—CHANGE OF CLIMATE . . .	32
IX.—THE HOUSE FOR A CONSUMPTIVE	39
X.—THE ROOM FOR A CONSUMPTIVE	43
XI.—FLIES AND MOSQUITOES . . .	47
XII.—PERSONAL CLEANLINESS .	50

CHAPTER	PAGE
XIII.—BATHS . . . . .	54
XIV.—RUBS . . . . .	58
XV.—DISPOSAL OF DISCHARGES FROM THE BODY . . . . .	60
XVI.—INFECTION FROM MILK . . . . .	66
XVII.—REST . . . . .	68
XVIII.—GETTING FRESH AIR. CLOTHING FOR COLD WEATHER. SLEEP- ING ROOMS. SLEEPING POR- CHES. OPEN-AIR REST IN DAYTIME. DEVICES FOR THE SUMMER . . . . .	70
XIX.—CARE OF THE BEDFAST PATIENT. THE BED. BEDSORES. BED BATHS . . . . .	88
XX.—ANTISEPTICS: FORMALIN. CAR- BOLIC ACID. CHLORIDE OF LIME. CORROSIVE SUBLI- MATE. COAL-TAR PRODUCTS. SUNSHINE . . . . .	97
XXI.—CLEANING AND FUMIGATING THE HOUSE . . . . .	102
XXII.—GRADUATED EXERCISE . . . . .	109
XXIII.—OCCUPATION AND AMUSEMENT FOR THE ARRESTED CASE . . . . .	112

# Contents

ix

CHAPTER	PAGE
XXIV.—THE PATIENT AND THE REST OF THE FAMILY . . .	116
XXV.—MARRIAGE, PARENTHOOD, AND TUBERCULOSIS . . .	124
XXVI.—PERIODICAL MEDICAL EXAMI- NATIONS . . .	126
XXVII.—SOURCES OF ADVICE AND ASSIST- ANCE . . .	129
XXVIII.—IS THE FIGHT WORTH WHILE? .	134
XXIX.—“HINTS AND HELPS”—BY DR. CHARLES L. MINOR . . .	139
XXX.—“FOODS AND THEIR PREPARA- TION”—BY LAURA A. CAUBLE . . .	162

## APPENDICES

I.—MANUFACTURERS OF SUPPLIES .	199
II.—HELPFUL BOOKS . . .	210
INDEX . . . . .	221





## ILLUSTRATIONS

	PAGE
TWO FORMS OF POCKET SPUTUM CUPS .	62
METAL HOLDER AND PAPER FILLER .	62
WIRE-STITCHED CUP USED WITHOUT HOLDER . . . . .	62
COMFORTABLE AND ADJUSTABLE CHAIR .	63
TWO FORMS OF SLEEPING BAGS . .	74
KNITTED CAPOTES . . . . .	74
FLANNEL COVERING FOR HEAD AND SHOULDERS . . . . .	75
GARMENTS SUITABLE FOR OPEN-AIR SCHOOL USE, OR FOR SLEEPING SUITS	75
WINDOW TENTS . . . . .	78
A DETACHABLE SLEEPING PORCH . .	79
ONE FORM OF PORTABLE BUNGALOW .	79
FLAT ROOFS FOR CITY DWELLERS .	80
“TWO HOOPS AND SOME NETTING AFFORD PROTECTION” . . . . .	81

	PAGE
A CHEAP LEAN-TO, WITH CURTAINS ON THE TWO EXPOSED SIDES . . .	82
A PORCH FOR THREE BEDS; DRESSING ROOM; KITCHEN-DINING ROOM; AND A BATH ROOM, WITH SEAT, STAND, AND CONNECTION WITH CITY WATER AND SEWAGE SYSTEM . . .	83
A CHEAP, TEMPORARY SLEEPING PORCH, WITH TENT FOR SHELTER . . .	84
ANOTHER TEMPORARY PORCH . . .	85
A GOOD STYLE OF PORCH . . .	86
A PERMANENT, PROTECTED PORCH, HAR- MONIZING WITH THE HOUSE . . .	87
"MANY NOISY GUESTS MEAN EXCITE- MENT AND FEVER" . . .	118
"A GOOD PORCH FOR THE MOTHER, BUT NEEDLESS EXPOSURE FOR THE CHILD" . . .	119

**HOME CARE OF  
CONSUMPTIVES**



# Home Care of Consumptives

---

## CHAPTER I

### WHOM WILL THIS BOOK SERVE?

**T**HIS book is written to give in compact and definite form the best knowledge now available on the home care of consumptives. No theory or practice is here presented that is not known and used by the tuberculosis specialists of the entire world. Information is here brought together that would require an amount of research and reading impossible for the average family.

Thousands of American consumptives cannot hope to obtain hospital or sanatorium care. Certain States make almost no provision for the victims of tuberculosis. Many private sanatoria charge rates beyond the

## 2 Home Care of Consumptives

reach of more than a limited percentage of the people; and many public institutions are planned to care only for the consumptives who are both financially and physically "down and out." Most important of all is the fact that less than forty thousand hospital beds are now available for more than three fifths of a million American consumptives.

The family income of thousands of cases for whom there are no available hospital beds varies between seven hundred and twenty-five hundred dollars a year. Among wealthier people there are many additional cases where sanatorium treatment cannot be obtained or where for various reasons it may not seem best. Among many poorer families accurate knowledge, supplementing devotion and resourcefulness, may work wonders. People belonging to the above-described groups are faced with the question, "What must we do to give this sick member of our family the best possible care at home?"

This book attempts, in the simplest possible language, to answer that question.

## CHAPTER II

### WHAT ARE THE CONSUMPTIVE'S CHANCES?

**A** CENTURY ago when a doctor pronounced a case of sickness to be consumption, in most instances it was rightly considered a death warrant. Today we know that favourable results may be obtained in the treatment of a large proportion of cases of tuberculosis. The first message of this book to the patient is, **HOPE!**

Nature fights steadily with you and not against you. Almost everyone is at some time infected with tuberculosis. Most of us never know that we have been infected because the germs are quietly killed or walled up in the body. It is only when a particularly severe infection occurs or when we are repeatedly infected while in a run-down condition that an active tuberculous process develops. When we are in poor physical condition as a result of overwork, loss of sleep, lack of proper food, worry, vicious



## 4 Home Care of Consumptives

habits, or an attack of some other disease, then the germs of tuberculosis previously implanted in the body get their opportunity to develop.

In some instances, because of the physical, moral, or economic poverty of the patient or because of the advanced stage of the disease before discovery, the case is hopeless from the beginning. But the doctor is justified in holding out hope of improvement or arrest under favourable circumstances, to practically all cases discovered in the first stage, to a considerable proportion in the second stage, and to many individual cases in the third stage.

There are no figures to show what proportion of cases treated in their own homes conquer the disease. The experience of sanatoria is to the effect that roughly one half of the cases admitted in the first or second stages of the disease who take treatment for some months are discharged "apparently arrested."

Some years ago people talked about "curing" tuberculosis. Now we speak of "arresting" the disease. Tuberculosis, a chronic disease, runs over a long period. In practically all cases of improvement the symptoms

## What Are Consumptive's Chances? 5

will almost wholly disappear and the patient will feel reasonably well although the infection still lingers in the body. Many patients, feeling almost well, have attempted, against the doctor's orders, to return to their old duties and habits and surroundings only to find in a few weeks that the disease had returned in a worse form than at the beginning. For this reason physicians speak of "arresting" rather than of "curing" tuberculosis. A case of the disease diagnosed early and treated till arrested is sometimes called an "apparently cured" case after the consumptive has successfully returned for two years to a full degree of normal life. It is not safe for any consumptive to think of himself as arrested, or as cured, until a competent physician has pronounced him to be so.

Here should be noted the curious fact that a consumptive may become well enough to work without being physically healed. Sometimes the disease germs and the healing forces in the body fight a drawn battle. Then under a strict supervision the patient may be able to resume gradually a normal way of living. A perpetual injunction is issued against overexertion, dissipation, undue

## 6 Home Care of Consumptives

exposure to inclement weather, and other unfavourable conditions. But he may be able to earn his living and resume his old social position among his friends. Life may be usefully and happily prolonged for years.

Such a person lives under the danger of a revival of his old disease. But that same quiet, sensible mode of living, which he is forced to follow, is a protection not only against a return of his tuberculosis, but against other diseases as well.

One of the most successful men of the author's acquaintance has for years followed his profession, supported a large family, and moved about in society freely; yet examination of his sputum twice a year has always shown a few germs. An unconquered spirit accomplishes wonderful things.

There is no royal road to success in the treatment of tuberculosis. The patient must bring to his task the enthusiasm and concentration displayed by the average American in playing baseball or making a fortune. Nature lays down the laws of the game. If you follow the rules and play hard and courageously, you have a good chance to win. If you break the rules, you are sure to

## What Are Consumptive's Chances ? 7

lose. Thousands of consumptives deliberately break the rules laid down by the doctor, most often those with regard to exercise, with serious results. Many a hopeless case has said, "If I had followed the doctor's directions, I believe I might have got well." This book will give you an insight into the rules, and it aims to give you also the inspiration to follow them.

## CHAPTER III

### WHAT IS TUBERCULOSIS?

#### THE SOIL AND THE SEED

**B**URN or boil some kernels (or seed) of wheat or cover them with strong acids, and their life is destroyed. Put them in a suitable granary and life is preserved, though they will not grow and produce a crop of their own kind. Plant them in fertile soil and give them sunshine, warmth, and moisture, and they will grow.

The germs, or seeds, or bacilli, of tuberculosis are rather like the wheat. Boiling or burning, or covering them with certain acids, will kill them. Unlike the wheat, however, they will die when exposed to direct sunlight or currents of fresh air for a few hours. When left in a dark, moist place, they do not grow a new crop; neither do they lose life, for they will grow when put into the proper soil. The

## What Is Tuberculosis? 9

proper soil for these germs is the human body, where they have warmth and moisture.

These germs are, indeed, seeds or plants, too small to be seen except through a microscope, and no more able to move about than a tree. When full grown, each germ breaks in two parts, making two germs where there was but one. If not hindered in any way, this process is soon repeated, so that within a month the result would be millions of germs. Outside the body these bacilli are easily killed; inside, they cannot be reached by chemicals without killing or injuring the patient at the same time. Only the forces provided in the body by Mother Nature can combat them.

### THE SYMPTOMS OF TUBERCULOSIS

The principal symptoms of consumption are given below. Any one of them may indicate either tuberculosis or other diseases. If any one persists a month or more without some other evident cause, a medical examination should be sought.

(a) A severe cold which cannot be shaken off, or a continual hacking cough; occasion-

## 10 Home Care of Consumptives

ally spasms of coughing, especially in the morning. Sometimes a person will develop a slight cough which he will not notice for a considerable time but which may be observed by other members of the family.

(b) A gradual, steady loss of weight.

(c) A gradual loss of appetite.

(d) Loss of strength. This may be either a general feeling of weariness or inertia or lack of ambition, or an unaccustomed degree of weariness noticed after climbing stairs or running for a train or any similar sharp exertion.

(e) A slight feverish condition, arising generally somewhere between two and eight o'clock each afternoon. In some cases this condition will last for only a short time daily. This increased temperature is generally accompanied by a more rapid pulse.

(f) Any discharge of blood in the sputum, even though it occur but once and be only a few streaks.

(g) Sweats at night, generally accompanied by a feeling of being cold in the morning. Other symptoms will probably appear before this one, as this commonly indicates that the disease has gone to the second stage.

(h) An unexpectedly slow recovery from an

## What Is Tuberculosis? 11

attack of another disease, such as typhoid fever or grippe.

(i) Hoarseness, huskiness, or any other trouble with the voice that persists for over two weeks in spite of care may indicate tuberculosis. It may prove to be a simple laryngitis instead; but it needs medical attention.

(j) The commonest form of tuberculosis among children is an infection of the glands, sometimes called scrofula. It will be recognized by the growth of hard bunches in the neck, or sometimes in other parts of the body.

(k) Tuberculosis of the bone or joint is commoner among children than adults. Its beginning is often not recognized early because the first stages are often not accompanied by pain. Any stiffness of the joints, or slight pains that at first may be called rheumatism, or growing pains, are suspicious symptoms.

### INFECTION AND DISEASE

The germs generally gain an entrance to the body in the air that is inhaled or the food that is eaten. Suppose a group of germs, attached to a tiny mote of dust, is taken into



## 12 Home Care of Consumptives

the nose or throat in breathing. They may be caught in the nose or throat, and cast out; or they may be carried into the little air cells of the lungs; or they may be swallowed. If swallowed, they may be digested or made harmless in the stomach; or they may find their way into glands, lungs, bones, or other organs. If the bacilli gain lodgment anywhere and begin to grow, one is said to be infected with tuberculosis.

They do damage in two ways. Their very growth and multiplication injures the organ in which they grow; and they cast off a toxin or poison, which produces fatigue.

If not resisted, they would multiply, and finally produce death. But the body fights hard for life. The chief duty of the white corpuscles of the blood is to kill disease germs. The healthy body has a sufficient supply of these corpuscles to dispose of any ordinary colony of bacilli. Sick, undernourished people lack an abundant supply, and are easier prey to germ diseases.

If the white corpuscles are unable to kill the bacilli, a tubercle is formed, enclosing the germs and the immediate area affected. A conglomeration of tubercles is a hard lump,

like cheese in appearance, anywhere up to an egg in size. By building a sort of wall about the affected area, Nature tries to limit the extent of the disease. Often at this time other micro-organisms become associated with the tuberculosis germs and make the healing process more difficult.

Various things may happen to tubercles. Small ones may remain in the body unchanged for years or for a full lifetime, the germs inside dying or remaining inert, like wheat in a granary. Sometimes they break up, the material of the tubercle passes off, and a cavity is left. If the vitality of the body is lowered from any cause, the tubercle may break open and the germs may be carried to other parts of the lungs. Then the battle has to be fought all over again; and this time it will probably be more serious than the first, since a larger area is liable to be involved.

Bacilli appear in the sputum only as they make their way into the air passages from broken-down or uncompleted tubercles. In the early stages of the disease, when there may be no such open lesions, there may be no germs in the sputum. In the final stages,

## 14 Home Care of Consumptives

millions of germs may be cast out daily from one or more open tubercles.

### HEMORRHAGES

Hemorrhage from the lungs is almost invariably caused by tuberculosis; but many consumptives never have hemorrhages. The amount of blood discharged at one time may be less than two drops or more than two cups full. They may appear in connection with other symptoms, such as a feeling of discomfort in the lungs; but often no warning is given. Very seldom does the end come while the patient is having a hemorrhage. Often it is the first grave sign of trouble.

Hemorrhage is caused by a break in a blood vessel in the lungs. A colony of germs collects on the outside surface of the blood vessel and impairs its action till the blood breaks through. The patient should inform the doctor about every hemorrhage, but should not worry about the matter till the doctor does.

Hemorrhages are precipitated by excitement and by any kind of overexertion, such as running or uncontrolled spasms of coughing. The wise consumptive will guard himself accordingly.

The consumptive who is overtaken by a hemorrhage should do the following things in the order named:

Refuse to become excited.

Lie down flat on the back on a bed, with the head turned a little to one side and, if desired for comfort, elevated slightly. The arms should preferably be allowed to lie quietly at the sides. The nurse or attendant, if any one is near by, should hold the cup or towel to catch the flow.

Have the nurse or doctor notified.

Take little water and no food except milk, broth, or gelatin, till the doctor has been informed and has prescribed. The thirst which is commonly experienced may be slaked by holding bits of cracked ice in the mouth.

Treatment for hemorrhage will vary with different cases, with reference to the period of rest needed. Obey the doctor with particular care.

#### PREDISPOSITION, RESISTANCE, AND IMMUNITY

Any person in a run-down condition, no matter what the cause, is said to be predisposed to tuberculosis. The children of

## 16 Home Care of Consumptives

consumptive parents are liable to be deficient in natural strength and vigour and are, therefore, predisposed from birth.

The body naturally offers resistance to disease germs. In the case of tuberculosis this resistance is increased by proper diet, rest, and the breathing of pure air. Indeed, our entire plan of treating consumption is to build up these powers of resistance. For example, tuberculin does not attack the germs directly, but rather stimulates resistance.

Almost never does a person have smallpox twice. Apparently, a surplus of resistance is built up in the first attack, which makes a quick disposition of any later attack. This condition is called immunity. After other contagious diseases such as typhoid fever, this immunity may last for years. For certain diseases, such as smallpox and typhoid fever, immunity may be artificially brought about for varying lengths of time by vaccination.

We have not yet learned how to produce artificial immunity to tuberculosis. A slight natural infection, successfully overcome, appears to produce some measure of immunity. Later infections, to produce active disease, must be more numerous or more severe.

## What Is Tuberculosis? 17

Some physicians believe that a degree of immunity may be transmitted to children by inheritance from consumptive parents.

### SPECIAL RISKS OF CHILDREN

Many cases of tuberculosis in adults evidently develop from latent infections incurred in childhood. We now know that children are more easily infected than was thought possible some years ago. Moreover, they are naturally subjected to special risks.

Consumptive parents kiss their children thoughtlessly on the lips, or drink from the same cup, or taste from the same spoon the food the child is eating. In addition, the child plays on the floor and may transmit germ-laden dust to its mouth by its hands. The child does not understand its danger and cannot exercise any precautions.

The lesson is obvious. *Consumptive parents must exercise endless vigilance to protect their children.*

## CHAPTER IV

### JUST AFTER THE DIAGNOSIS

MANY people feel that there is something disgraceful in having tuberculosis. There is no reason for this feeling. Some of the best and greatest of men have suffered from this disease. Only when the consumptive is so careless or vicious that he spreads the disease to other people is there anything disgraceful about having tuberculosis.

Because of this false feeling many people, after a diagnosis of tuberculosis by one physician, go to another doctor and say in substance, "Dr. Smith says I have consumption. We have never had it in our family and I don't see how I could have it. The very idea is terrible to me. I wish you would look me over and tell me that Dr. Smith is mistaken."

There are times when it is advisable to change physicians or to call a second physician

in consultation; but it is not wise to go to a doctor and ask him to assure you that your trouble is not tuberculosis. For a variety of reasons some practitioners will accommodate themselves to the desires of the patient, who will then delay treatment until it is too late. When a competent physician has diagnosed you as a consumptive, thank him for his frankness and prepare to fight the disease.

The first requirement is that you start your fight *at once*. Nothing is of equal importance. A delay of a month, even of a week, may make all the difference between a fight of months and a fight of years or even an unsuccessful fight. Don't let the convenience of your employer, the apparent necessity of earning a little more money, or household cares, or anything else, stand in the way of an immediate beginning of the battle. The patient should not say, "I can't begin to look out for myself till such and such things have been done." Instead, he should say, "I must look after myself *now*. What is the quickest disposition I can make of this other matter?"

As soon as a case has been diagnosed, the family should have a council of war to discuss



## 20 Home Care of Consumptives

home arrangements and finances. If it is true incipient tuberculosis in a favourable condition, it may seem best to the doctor to plan for a rather short, decisive battle of a few months rather than a long campaign. This may make possible a sojourn for a few weeks in a good sanatorium, or the temporary removal of the family to a far better location, or some other similar measure. Generally it will be necessary to plan for a campaign instead of a single battle, and under those circumstances the means of the family may have to be husbanded. If it is necessary to mortgage the home, or postpone the entrance of one of the children to college for a year, or keep the old automobile instead of buying a new one, or make any other sacrifice, let it be done unselfishly and whole-heartedly. Let the struggle begin with faith and hope.

Some years ago a physician took three young men whom he had diagnosed as tuberculous to a Cincinnati specialist to confirm his diagnosis. The specialist said that all three had tuberculosis in the early stages of the disease. After advising the young men he talked privately with the doctor.

"I know exactly what will happen in each

of these three cases. Mr. A. thinks we do not know what we are talking about because he does not yet suffer any pain. He can't believe his condition is serious. He will keep on having a good time every night and working every day till he is too weak to go on. Then he will come back to you when it is too late to do anything for him.

"Mr. B. is convinced that he has tuberculosis, and is somewhat alarmed. As he has plenty of means, I advised him to go to California for treatment in a sanatorium; and he promised to follow my advice. But he will go about it in his own way, in spite of instructions. He will take a leisurely trip out, seeing the various cities and having a good time. When he gets there he will mix in the town and hotel life for a month or so, playing tennis and dancing, before he goes to the sanatorium. So he will put off starting his battle till it is too late.

"Mr. C. will start his struggle at once and will persist in it with deadly seriousness. You will have no trouble in making him follow directions. He will get along all right and will be at work in a couple of years."

The specialist had judged all these cases

## 22 Home Care of Consumptives

exactly right, as events proved. They are typical of the various attitudes that people take after the doctor's diagnosis. Each patient must choose for himself which class he will join.

## CHAPTER V

### THE FUNCTION OF SANATORIA AND HOSPITALS

**S**ANATORIA offer advantages that should be considered before the patient decides on a fight at home.

Tuberculosis sanatoria are generally located where they have some especial advantage, particularly pure air, dry surroundings, and a pleasant outlook. Skilled medical and nursing forces are at hand to study and supervise the case thoroughly and deal with emergencies quickly. The diet is especially adapted to the needs of the sick. The atmosphere is invariably cheerful and hopeful. Good spirits are as contagious as the disease itself, and spread at once to newcomers. The gentle discipline enforced by patients and staff makes the observance of rules easier than at home; and many temptations are automatically removed. Most important is the fact that the danger of infecting other members of the family is removed.

## 24 Home Care of Consumptives

This last danger increases as the consumptive passes to the second or third stage. Where possible, such patients should be cared for in appropriate hospitals, even at the cost of some discomfort and loneliness, unless the home is well adapted in all respects for the care of bed-fast patients.

## CHAPTER VI

### PATIENT AND PHYSICIAN

**I**F you must fight tuberculosis at home, *employ the most competent physician of your locality, give him your confidence, and co-operate with him heartily.* Without competent medical advice you can get nowhere. Go to the best doctor. So far as money is concerned you will receive as generous treatment from the best doctor of your city as from any other.

Do not withhold anything from him. Sometimes patients, through false modesty or through shame at having certain diseases, hide from the doctor conditions which are extremely important.

Accept the doctor's leadership. If he is wise he will tell you, where possible, the reasons for the various directions he will give you. Sometimes it may be impossible for him to explain exactly the reason for some of his directions. Follow them just the same.

## 26 Home Care of Consumptives

It is not wise to discuss with other sick people the nature and symptoms of your disease and the method of treatment adopted by the physician. There are many differences between cases and what may be wise in one case may be unwise in another. You are almost certain to get some bad advice from other sick people; and in addition you are quite certain to spend too much time thinking about yourself.

No doctor knows everything about the diagnosis and treatment of consumption; but any doctor is a better adviser than the village gossips. We are too apt to find fault with all physicians because some of them have been trained in poor medical colleges, or because for various reasons they are incompetent or unwilling to treat consumptives.

A few physicians do not like to handle tuberculosis because they fear the disease themselves. Others, especially some of the older men, regard tuberculosis as almost always hopeless and consequently manifest little interest in their cases. Certain physicians will generally advise their patients to go away somewhere for treatment, *without making thorough inquiry into all the circum-*

*stances, including the patient's financial condition, and without giving the patient definite information about the place recommended.*

By those signs one may judge that he wants to get rid of the case. Another doctor should then be consulted.

Advanced consumption can be often detected at a glance. Incipient tuberculosis of the lungs can be diagnosed only by a careful examination of the chest and back, with the patient stripped to the waist. If your doctor makes a perfunctory examination through your clothes, consult another physician. All cases, no matter what the stage, should be examined thoroughly.

There are many quack doctors. They commonly advertise extensively in the papers. They will guarantee to cure anything within a specified time, for a given sum of money. You can recognize the quack by those signs. Shun him as you would the plague. In some cities there are a few thoroughly incompetent physicians. The other doctors recognize them as such and refuse to have anything to do with them. They often keep up a practice by employing some of the methods of the quack. Avoid such physicians.



## 28 Home Care of Consumptives

The use of strange or mysterious medicines and methods in caring for the sick has an attraction for a large number of people. An occasional physician who is more anxious to make money than to help the sick will make use of this fact and introduce methods in the treatment of tuberculosis which will cause much talk and will serve to advertise and enrich him. Sometimes such a doctor will give tuberculin indiscriminately to all his tuberculous patients without observing carefully the results. Others may use electrical treatments, or vapours to be inhaled, all given indiscriminately to all their tuberculosis cases. Such treatments may actually injure the patient if from no other cause than the unnecessary use of strength in making numerous calls at the doctor's office. When people excitedly claim that Dr. Blank of your city is using a sure cure for tuberculosis,—for instance, some strange foreign serum,—you had better remember that if the treatment were as good as its recommendations, all the other doctors would be using it also.

The essentials in the treatment of tuberculosis are sound medical advice; a plentiful, varied diet of nutritious and easily digested

food; fresh air every minute possible; comfort of body and mind; complete rest while the symptoms indicate activity of the disease; and a gradual resumption of exercise and general activity when the disease has been arrested. A competent physician may direct the treatment for a particular case in a manner different in *details* from that laid down in this book; the treatment prescribed by the physician who is behind the times will be different in some of the *essentials*. If your physician is of that sort, you had better at least call another doctor in consultation.

## CHAPTER VII

### MEDICINES IN TUBERCULOSIS

**S**CIENTISTS have long worked at the problem of developing some preparation that would act as a sure cure for this disease. Some day it may be found. But at the time of publication of this book there is no such existing preparation generally recognized by the physicians of this country.

Especially avoid all patent medicines advertised as cures or remedies for tuberculosis. There are many such preparations with extremely plausible advertisements in the newspapers. The Pure Food and Drug Law is not yet sufficiently strict to enable the elimination of all such concerns. Some of the preparations are positively harmful and none of them is helpful. You had better believe this disinterested book rather than their advertisements. There are very few medicines that will afford you even the slightest benefit. These you should take only on the

recommendation of the physician and strictly according to his directions.

For the relief of certain symptoms, as, for instance, an irritating cough during the night, the doctor will probably be able to prescribe a medicine for you.

Tuberculin is used by some physicians in the treatment of selected cases of tuberculosis with favourable results. It can best be used in hospitals where the effects of its use may be carefully observed. The use of too large a dose results several hours later in an unfavourable reaction with considerable fever. If your doctor uses tuberculin in your case, co-operate with him by keeping a careful record of your temperature, taken at intervals which he will specify. Do not depend on tuberculin to cure you of consumption without the use of all the other methods of caring for yourself.

## CHAPTER VIII

### CHANGE OF CLIMATE

LESS tuberculosis occurs among the residents of certain parts of the country than in other sections; but much of the difference is attributable to causes other than a difference in climate. The old plan of sending all sorts of cases of tuberculosis running about the country from south to north, from east to west, from seashore to mountain, or the reverse, is no longer followed by the well-informed physician. Change of climate is not now considered an essential part in the treatment of tuberculosis.

Certain sections of the country unquestionably have a climate that is favourable for the treatment of consumption. But credit has been given to climate for many "cures" that have been brought about simply by the fact that the patient, who could not or would not take care of himself at home, has done so at the health resort. This is said espe-

cially for the benefit of the man who is forced to take the treatment at home and believes he is being denied some indispensable thing which those at the health resort are obtaining.

Taking the cure in your own locality and climate, while likely to be a slower process, has one distinct advantage. You are relieved of the danger in the reverse change of climate when you return from the health resort to your home. In some instances eastern consumptives who take treatment in the extremely dry section of the south-west or in high altitudes in Colorado find that they cannot return to the damp climates of their former homes. As long as they remain in their western surroundings, they feel well; but immediately upon their return unfavourable symptoms set in. Sometimes this circumstance compels them to take up permanent homes in places where they have "chased the cure." Less difficulty is now being experienced in this matter than was formerly the case, because patients are more generally following medical advice about the time and manner of their returning east.

If you are able to obtain the advantages

## 34 Home Care of Consumptives

of treatment in the best climate without any disadvantages, you should certainly do so. But you should take into consideration a number of factors before going far away from home.

Some western railroads cross the mountains at a high elevation. A consumptive going west, if he has any heart trouble, had better find out the highest point of elevation reached by the railroad he has selected and consult his doctor before risking the trip. The strain of a long, hard, railroad trip is often too severe to be counterbalanced by a good climate. The trip may be undertaken at a crisis in the disease and may result in a dangerous exhaustion. A consumptive beyond the first stages of the disease should not undertake any long railroad or steamship journey alone.

It is bad enough to be homesick when you are healthy. To be homesick when you are ailing and among strangers in a distant place is intolerable. A consumptive may lose more from this cause than he can gain from the best of climates. If you are afflicted with homesickness, you had better stay at home.

An essential part of the treatment of tuberculosis is a proper mental condition and reasonable freedom from worry. For many eastern consumptives the trip to the extreme southwest means an outlay they can ill afford. If the trip must be taken at the expense of worry about money for one's self and for the family left at home, it had better not be taken. Eastern specialists are now advising their patients not to leave for the west unless they have a thousand dollars available for treatment in addition to sufficient funds for a round-trip ticket. In the past a tremendous number of consumptives have been shipped west without even sufficient money to pay for a return trip. This has caused in some sections a congestion of people too sick to work and too poor to pay their way. They have had to call on public or private charity until charity has become exhausted. Naturally in such communities the consumptive without funds is decidedly unwelcome. You had better not add to that number.

Do not go to any city or section reputed to have an excellent climate or sanatoria without first obtaining definite information



## 36 Home Care of Consumptives

about the various expenses, the different institutions or boarding houses, and the possibility of admission to one of them. In the selection of climate be guided by the advice of a physician well informed in such matters; and possibly have the doctor make all the preliminary arrangements for you by correspondence with a sanatorium, physician, or tuberculosis association in the locality selected.

We give below addresses from which you may be able to obtain information concerning accommodations in some of the most widely known American resorts for consumptives. In writing to these addresses or elsewhere for information, it is well to remember two things. Associations, societies, leagues, and their secretaries, generally have insufficient funds to carry on their purely local work. Correspondents should, therefore, enclose at least enough postage to pay for sending the folders and information requested. And secondly, if you are confused by the claims and recommendations of various localities, consider that Chambers of Commerce particularly are not inclined to underestimate the advantages of their sections.

## **Arizona:**

Dr. John W. Flinn, Secretary, State Tuberculosis Association, Prescott.

Mrs. H. Drachman, Secretary, Tucson Public Health League, 347 South 6th Avenue, Tucson.

Chamber of Commerce, Phoenix.

## **California:**

Executive Secretary, State Tuberculosis Society, 111 Normal Hill Centre, Los Angeles; or at 719 Forum Building, Sacramento.

Chamber of Commerce, Los Angeles.

Chamber of Commerce, San Diego.

## **Colorado:**

Executive Secretary, Rocky Mountain Public Health Association, Room 17 State Capitol Building, Denver.

Chamber of Commerce, Colorado Springs.

## **New Mexico:**

Secretary, Commercial Club, Albuquerque.

Chamber of Commerce, Silver City.

Chamber of Commerce, Santa Fé.

## **New York:**

Secretary, Bureau of Information, 64 Main Street, Saranac Lake.

## 38 Home Care of Consumptives

### **North Carolina:**

Secretary, State Tuberculosis Association,  
Sanatorium.

Chamber of Commerce, or City Health  
Officer, Asheville.

(Some leaflets of general information about  
the climate, towns, and transportation  
facilities of that section from the General  
Passenger Agent, Southern Railroad, Wash-  
ington, D. C.).

### **Texas:**

Secretary, Public Health Association, State  
Capitol Building, Austin.

Chamber of Commerce, San Antonio.

Chamber of Commerce, El Paso.

## CHAPTER IX

### THE HOUSE FOR A CONSUMPTIVE

**I**F you must take treatment in your own home, make up your mind that it is likely to be a campaign of one, two, or three years rather than a short battle, and take account of all your resources and surroundings in preparation for the struggle. If the house you live in is not suitable, move to another one.

The house should not be in a low, damp place, liable to be flooded in high water or constantly enveloped by morning fogs. Railroad yards or manufacturing plants that throw off clouds of smoke or foul odours make unfavourable surroundings.

The house should be at a good elevation. A sandy or gravelly soil is best because it affords rapid drainage after a rain. The house should have some exposure to the sun every day. A home that is entirely surrounded by great trees or by tall buildings is

## 40 Home Care of Consumptives

not a good residence for a consumptive. If it is necessary to live in the city, choose a house that is separated from its neighbours by at least ten feet—preferably more. Do not forget the possibilities in flat roofs, where shacks or tents may be erected. In order to get a dwelling surrounded by ample space for sunlight and ventilation, it may be necessary to move to the suburbs, or the country.

Before moving into any house it is advisable to see whether it is near any large city dump or near a livery stable with big, neglected manure piles. Avoid such surroundings. If a nuisance of this sort intrudes into your locality, protest to the city health department and keep on protesting until the nuisance is abated under existing ordinances, or until the health department is empowered by ordinance to handle such cases.

See that the plumbing of the house is kept in good condition. Offensive odours and even disease may result from defective plumbing.

If you live in the country, be careful about your water supply. Water from deep wells and all-the-year-round springs is usually safe. Water from shallow wells or shallow springs

## The House for a Consumptive 41

and even from brooks is often contaminated. In too many instances the well is near the manure piles or the outbuildings, and at a lower level. Various impurities and disease germs may consequently get into the water supply. A very large amount of typhoid fever in country districts is spread in this way. From the same sources the water of brooks, especially in very hilly regions, is often contaminated near its source.

To make sure of the purity of your well, write to your State Board of Health at your State capitol for a container in which you may send a sample of the water for free examination in their laboratories.

On request your State Board of Health will probably send you free of cost bulletins regarding the construction and care of outbuildings and the disposal of excreta to prevent the possibility of spreading disease. Valuable information on many similar matters may be obtained free, or at slight cost, from the publications of the U. S. Public Health Service, and the Department of Agriculture.

Whatever the situation and condition of your house, make up your mind to use it to

## 42 Home Care of Consumptives

the best advantage. In many instances small porches or flat roofs or open spaces in the yard go unused because the family have not considered what use might be made of them.

Remember that the most important thing is not your surroundings but the intelligence with which you use those surroundings.

## CHAPTER X

### THE ROOM FOR A CONSUMPTIVE

**I**N your home choose a good-sized room for the care of the consumptive patient. Preferably it should have windows on at least two sides, in order to secure the best ventilation. These windows ought to extend close to the ceiling in order that, when the windows are opened from the top, all the air near the ceiling may have a chance to float out. If the windows do not reach close to the ceiling, on hot, still days a pad of air is left near the ceiling which is not changed when the windows are opened.

To avoid too strong draughts in very cold weather, cut a board six or eight inches wide to fit inside the window-frame and put it at the bottom of the window about two inches inside the lower sash. When the lower sash is raised to a height somewhat less than the height of the board, the incoming current of air is thrown upward and dispersed over



## 44 Home Care of Consumptives

the room. Another device which may be used either at the top or the bottom of the window is made by constructing a strong framework of boards to fit in the window directly above the upper sash or below the lower one. An ordinary fly screen may also be used. Over this frame a thin cotton cloth may be stretched and tacked. This will be found especially serviceable in cold weather if the air is full of smoke and dust, for much of the foreign matter will be caught in the cloth. When the cloth becomes covered with dirt, it should be replaced.

The floor should be of hard or painted wood. There should be no carpet on the floor; but small rugs of washable material are allowable. Heavy curtains and similar hangings, which serve largely to collect dust, should be banished. Window shades, and light curtains of washable materials may be allowed, provided the curtains are frequently washed. Knickknacks and ornaments which collect dust and increase housework should also be taken away. A few cheerful pictures may be allowed. Cases of books should not be kept in the room. If the sick person is well enough to read, a few treasured books may be kept

## The Room for a Consumptive 45

near him. It is not wise to loan them to anyone else because books are easily infected and it is almost impossible to disinfect them.

The bed occupied by the patient should be kept away from the walls of the room. A position near the middle of the room or near the windows will give the best ventilation. Draughts may be avoided or modified by hanging a sheet over the head of the bed. And right here you might as well begin to get over your fear of draughts. Draughts are dangerous if the body is not protected, or is overheated and perspiring, but seldom otherwise.

Few houses are built, as they should be, with direct light and ventilation into the clothes closets. In the constant effort to keep the room clean do not forget the closet. All the clothes of a consumptive should be kept separate from those of the other members of the family, and occasionally they should be taken out for sunning and airing.

In sweeping the room be sure that the work is so done that a cloud of dust is not raised. This dust may reinfect the patient or infect other people. The ideal method of cleaning

## 46 Home Care of Consumptives

the room of a consumptive is with a vacuum cleaner.

Otherwise, remove the rugs from the room for shaking and sunning out of doors. Over your broom put a cloth dampened in a one to eighty solution of formalin, or some other good disinfectant. (See section on disinfectants.) This will collect the dust without scattering it through the air. The broom cover should be taken off and washed each time it is used.

Another method to avoid raising dust, when sweeping a hardwood floor, is to scatter a little moistened sawdust over the floor. Dust mops are also sold for use on hardwood floors. For a carpeted floor a newspaper may be moistened, torn into bits, and used instead of the sawdust.

Never use a feather duster or a dry dust rag. These scatter dust through the air. Patent dust rags that take up the dust may be had at many stores. An ordinary dust cloth, moistened slightly with water or oil, will answer the same purpose.

## CHAPTER XI

### FLIES AND MOSQUITOES

**F**LIES may carry the germs of disease from place to place on their feet; and both flies and mosquitoes may disturb the rest of the patient.

Screen your windows to keep out the flies. Kill those that get in. Better than that, see to it that the surroundings of your house are kept clean and prevent the breeding of flies. Flies may breed in heaps of kitchen refuse; but probably 90% breed in piles of horse manure. It takes about ten days for the breeding of flies; and they seldom travel more than a quarter of a mile from the breeding place. To prevent the breeding of flies, covered garbage pails should be used instead of allowing kitchen refuse to accumulate in a heap in the yard. If it is necessary to allow horse manure to accumulate in piles instead of spreading it over the fields every

## 48 Home Care of Consumptives

ten days, sprinkle the edge of the pile every ten days with borax.

If your neighbour tolerates about his premises filthy conditions that breed flies, complain to the health officer. You may not get any action for a long time because many health officers, in country districts and small towns, do very little beyond drawing their salaries. (They are paid too little to justify one in expecting more of them.) That condition, however, is due to the fact that they have no public support in any effort to maintain clean conditions in the community. Accompany your protest with the assurance that he will have your support in any sanitary measures he finds it necessary to take. When enough people do this to create a real public sentiment, your health officer will act.

To rid a room of flies, darken the room, leaving one small opening to the outer air. With a brush sprinkle about the woodwork a small amount of a solution of one part formalin to ten parts of water. As the fumes from the formalin irritate the eyes and throat, you had better leave the room for some time after using it.

## Flies and Mosquitoes 49

The big wire flytraps are very effective in dealing with the pests.

Mosquitoes are bred in stagnant water. Small pools, ditches, and rain barrels are the commonest breeding places; but the tin can in the back yard, the pool in the clogged gutter on the roof, and other similar places must **not** be forgotten. To rid your neighbourhood of mosquitoes, fill up or drain where possible all the pools and ditches, no matter how small. Ditches and pools which cannot be drained should be sprayed with crude oil, till the top of the water is covered. If repeated a number of times at intervals of about ten days, this method is thoroughly effective.



## CHAPTER XII

### PERSONAL CLEANLINESS

**T**HE danger of spreading the germs of the disease and the work of keeping the room thoroughly clean will both be decreased if the patient will cultivate fastidious personal habits.

The hands should be washed before and after each meal. This reduces the danger of reinfection and also the transfer to other people of germs which the hands may have taken from the lips. The finger nails should be kept well trimmed and carefully cleaned. The use of hot water and soap in cleansing the hands is ordinarily sufficient, without using any disinfectant solution.

The teeth should be cleaned two or three times daily. At least once a day a good tooth powder should be used. Brush the upper teeth downward and the lower teeth upward. Brush the back of the teeth as well as the front. Do not brush the teeth over a

wash basin unless you scrub the wash basin afterward. Keep the toothbrush where the sunlight may strike it. Have a dentist examine the teeth at least twice a year. In order to be perfectly fair, the patient should let the dentist know that he has tuberculosis, so that the dentist may use special care in protecting himself and in disinfecting the instruments.

Avoid putting anything into the mouth except food, drink, and the toothbrush. Many people have an unconscious habit of putting pencils, money, and other objects into the mouth, by means of which the disease may be spread to others.

It is almost impossible to keep the beard and mustache free from sputum. A consumptive should accordingly be smooth shaven.

The patient should, of course, have his individual toilet articles, which for a man include a shaving outfit.

Instead of ordinary handkerchiefs to catch sputum, use cloths or paper napkins, to be burned. Do not keep soiled handkerchiefs in the pockets, as clothes may become infected in that way.



## 52 Home Care of Consumptives

The patient's clothes should be aired and sunned frequently, and should be brushed out of doors.

The patient who is comparatively free from cough and who has strength enough to go to the dining room without any feeling of fatigue, will probably be permitted by the physician to eat his meals with the rest of the family. The entire family should see to it that cheerful conversation is the rule at the table. Worries about money, and personal differences among the other members of the family, should be discussed at some other time. The patient must do everything in his power to see that the meal period is cheerful. He should see that there is no possibility of his infecting other members of the family at table. If he is compelled to cough or expectorate, he should leave the table for the time being. He should have his own napkin. Paper napkins which may be burned are better than linen napkins, which may possibly be confused with others. The dishes used by him at table should be removed to the kitchen separately and any scraps of food left should be burned. The dishes should then be boiled separately before being washed.

It is advisable to keep his dishes separate from the others as an added precaution.

Many patients are able and anxious to help with some of the housework, for instance in the preparation of some of the food for the table. That is perfectly safe for those foods which are to be cooked before they are used. For instance, the patient may shell peas, peel potatoes, or cut up string-beans. He should not, however, prepare for the table such things as strawberries and lettuce, which are to be eaten without being cooked.

For the care of soiled personal and bed linen, see section on disinfectants.

## CHAPTER XIII

### BATHS

THE chief function of the skin is to aid in disposing of the waste products from the body. We are conscious of that process in warm weather because of our perspiration. The process goes on continuously, even in cold weather, unless through neglect the pores of the skin become clogged with the waste products. In that case the other organs of the body are overtaxed to do both their own work and the work of the skin.

Two or three times a week a warm bath should be taken, using any good soap. The patient will, of course, have his own separate soap and towels. The best time for a cleansing bath is just before bedtime. At any rate, it should not be taken within one hour after meal time.

It is to be hoped that shower baths will rapidly take the place of bathtubs in all our

homes. Only a little carelessness and neglect will cause bathtubs to be polluted with all sorts of dirt, and with disease germs if any member of the family is afflicted with a germ disease.

(For bed baths see section, "Care of the bedfast patient.")

Most *healthy* persons will delight in taking cold baths immediately upon arising every morning in the year. This will stimulate a sluggish circulation, quicken the appetite for breakfast, and harden the body to a better endurance of exposure to cold and dampness. In fact, a person who will sleep in the open air and take a cold bath every morning will hardly know what it means to have a cold; and getting the feet wet will lose half its terrors. The best way to take a cold bath is under a shower; and if a shower is not available, the body may be washed quickly with a sponge or a towel soaked in cold water, or one may stand in the bathtub and splash over the body the cold water as it runs from the faucet. It is not advisable to take a cold tub bath. The bath should always be followed by a quick, hard rub with a coarse towel. If one feels stimulated and warm after the rub,

## 56 Home Care of Consumptives

it is evidence that the cold bath is a good thing for him.

The *consumptive* should never venture to take cold baths except on the advice of his physician. If the disease is at all far advanced, or if the individual does not respond quickly to the bath and rub, cold baths may be harmful. If the patient has not been accustomed to taking cold baths, and they are advised, they should be begun gradually, using cool water at first.

Some patients have not sufficient strength to endure an entire cold bath, yet need to be hardened against catching cold, and to be stimulated. Under such conditions the physician may advise the sponge bath of the throat and chest immediately upon arising. To take such a bath, dress partially, leaving the arms, neck, and chest exposed. Quickly bathe the neck and chest, and possibly the arms, and dry with a rough towel.

Some patients find stimulation after a sponge bathing of the neck and chest in standing for a moment before an open window while taking gentle exercises with the arms and breathing deeply.

*The patient should not undertake any of the*

*suggestions given above except on the advice of his doctor.* If a pleasant reaction and feeling of stimulation does not result, the fact should be immediately reported to the doctor who will advise a change of treatment.

## CHAPTER XIV

### RUBS

**F**OR certain conditions, relief may be obtained by giving the patient rubs of various sorts.

For emaciation and weakness, give first a cleansing bath and then rub the skin gently for about fifteen minutes with olive oil. Sometimes cocoa butter or liquid petroleum may be substituted for the oil. This is particularly good for those patients who find oils and fats objectionable in their food.

In case of excessive night sweats, rub the skin gently just before going to bed with a mixture of 1 part of pure apple vinegar to 4 parts of water.

To reduce fever, to stimulate, and sometimes to afford relief from night sweats, rub with pure grain alcohol or pure whiskey.

The use of witch-hazel as a rub will give pleasure to a patient who is tired from lying for a long time. Witch-hazel has, however,

no particular value as a medicine; it is the rubbing rather than the witch-hazel that affords the relief.

Where the patient suffers from a high temperature, the doctor may be able to prescribe other treatments that may give relief.

For rubs for prevention of bed sores, consult section on the care of bedfast patients.

The fact must be emphasized that rubbing by an unskilled person may give the patient temporary pleasure and relief; but to be of any real value in sickness rubbing must be done by a trained and instructed person. Here again the employment of a trained nurse, at least for a time to instruct the family, will be advantageous.



## CHAPTER XV

### DISPOSAL OF DISCHARGES FROM THE BODY

**T**HE germs of tuberculosis may leave the body of the consumptive in four principal ways: in the spit, in the spray from the mouth in the act of coughing and sneezing, in the discharges from open sores in tuberculosis of the bone or joint, and in the excreta in tuberculosis of the intestines.

*If all germs escaping from the bodies of all consumptives could be caught and destroyed, tuberculosis would become a relatively uncommon disease in less than a quarter of a century.* Consumptives may not only infect others, but they may reinfect themselves. Consequently both self-interest and the interest of others will lead the patient to take every precaution to prevent the spread of the disease. The first two of the ways of disseminating the germs mentioned above are by far the most important.

Some real danger arises when infected

## Disposal of Body Discharges 61

sputum is cast on the sidewalk, as it may then be caught on the shoes of a passer-by and be tracked into the house. But the danger of spreading or contracting tuberculosis through infected sputum in the streets has probably been exaggerated. The action of direct sunlight and fresh air destroys the bacilli or makes them harmless in a few hours.

We know now that the real danger lies not in receiving one casual infection but in repeated infections; and the poorer one's health, the greater the danger. All these facts together indicate that the patient's immediate family and closest associates are subjected to an increasing danger unless unceasing vigilance is shown in collecting and destroying sputum. It is not enough to be careful nine tenths of the time. *All sputum must be destroyed.* Because most cases receive instruction too late, or incompletely, or inaccurately, and because the instructions are often followed carelessly, consumption is a house disease and a family disease.

Under no circumstances should a patient swallow any of the phlegm which he raises

## 62 Home Care of Consumptives

to his mouth. In this manner he may infect his digestive organs.

Often tuberculosis is not diagnosed until the disease is well advanced in the first stage, when germs may at times be plentiful in the sputum. In spite of the doctor's prescription of complete rest, many such patients will continue for some time to work and to carry on ordinary social intercourse. Through the careless disposal of sputum at this period they may menace the health of associates or fellow employees.

The wealthy patient may find ornamental glass or silver bottles which may be inconspicuously carried and used to catch sputum. Less expensive metal flasks, and paper flasks for pocket or handbag, may also be obtained. (See section, Manufacturers of Supplies.)

Waterproof pockets of oiled silk may be procured to put inside a man's coat pocket or in a lady's handbag. A supply of paper napkins or small squares of cloth may be carried in another pocket, used one at a time when needed, and put in the silk pocket, which should be removed and cleansed daily.

One of the best methods of collecting sputum of a housebound patient is the use



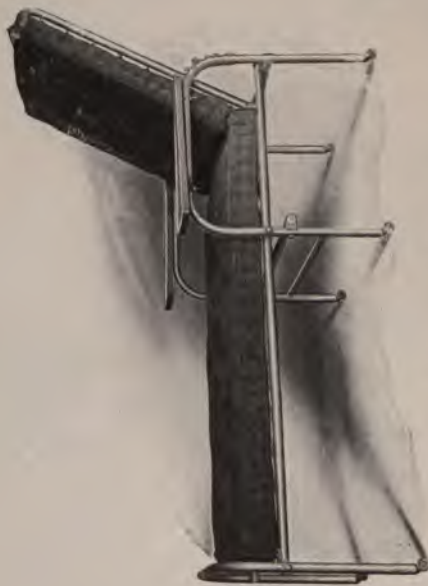
Metal holder and  
paper filler



Two forms of pocket  
sputum cups



Wire-stitched paper  
used without  
holder



Chairs should be comfortable and adjustable. Firm, flat backs are better than canvas

## Disposal of Body Discharges 63

of paper sputum cups which can be burned with their contents, or which may be buried or emptied into the water closet if a disinfectant solution has been used in the cup. Some forms of cups are intended for use in metal holders, which should be boiled for a few moments about twice a week. Another form may be so folded as to be used without the metal container.

The use of a sputum cup is difficult for a very weak patient, and is unpleasant for many others. Such should be provided with paper napkins or small squares of cloth. An opened paper bag may be pinned to the bedding so that the used napkins or cloths may be dropped into it. The bag and its contents can be handled without danger, and should be burned. This should be done at least once daily. The patient does not have to lift himself up or turn on his side, as in the use of the sputum box; and only one hand need be drawn from under the covers. This is an advantage in extremely cold weather.

In some cases where the expectoration of an advanced or moderately advanced case is exceedingly profuse, the physician may

## 64 Home Care of Consumptives

possibly permit the use of a spittoon in which some disinfectant is used.

Under any circumstances, when any sputum falls on the floor, it should be covered with some disinfectant solution which should be allowed to stand for several minutes. If sputum gets on the bedding or night gown of the patient, it should be cleaned up at once and, preferably, fresh linen should be put on. Danger arises both from wet sputum and from dried sputum, tiny flakes of which may float in the air.

The second principal mode of spreading the germs is through the spray from the mouth when the consumptive coughs or sneezes. There is very slight if any danger from the ordinary exhalation of the breath. In coughing or sneezing, tiny drops of sputum may be cast in the air, to float about the room and infect other people or the room itself. To guard against this, an ample supply of paper napkins or pieces of cloth should be given the patient to hold over the mouth in the act of coughing or sneezing. These cloths or napkins should be sufficiently large so that the patient's hand is not soiled in using them. Paper bags should be pro-

## Disposal of Body Discharges 65

vided, as suggested above, for their disposal after use. It is not wise for this purpose to use ordinary handkerchiefs.

In cases of bone or joint tuberculosis there may be a discharge of infected matter through an open sore. The physician will give directions as to the care of the affected areas and the disposal of the discharge. In handling any soiled bandages care should be taken that the hands be not soiled; and after the bandages have been disposed of, the hands should be carefully washed.

In intestinal tuberculosis, the doctor will give directions for the disinfection of the excreta by the use of chloride of lime or formalin, as given in the section on disinfectants.



## CHAPTER XVI

### INFECTION FROM MILK

**A**BOUT ninety-five per cent. of all cases of tuberculosis are contracted from other consumptives in one of the ways suggested in the previous section. The remainder, mostly children less than five years of age, get the disease by drinking milk from tuberculous cows.

Milk that is milked from healthy cows by clean, healthy men, is promptly cooled and bottled, and is kept clean and cool till used, is good food; but all of these conditions are necessary. If the milk is not kept clean and cool, bacteria will develop in it rapidly, making it valueless or unfit for food. Milkers convalescing from typhoid may spread an epidemic of the disease through the milk. And some (not all) tuberculous cows give infected milk. For all these reasons a careful supervision of the milk supply is desirable.

The danger of contracting tuberculosis

from milk is greatest for children less than two years of age. Little babies should, therefore, be breast-fed if possible. Where this is not possible, and the doctor advises the use of dairy milk, get certified milk from tuberculin-tested cows; or get pasteurized milk; or pasteurize the milk yourself. Then dismiss the danger from your mind.

## CHAPTER XVII

### REST

NO chapter of this book is more important than this brief one.

Just after a diagnosis of tuberculosis, and while any active symptoms persist, the *patient must rest*. The body may generate enough strength daily to do a day's work, or to fight the disease, but not to do both. Keep up hard work or strenuous exercise, and the result is slow suicide.

At some hospitals, patients with high fever or other like symptoms are not allowed to do so much as move their own chairs. As the disease becomes less active, more movement is permitted; but any fresh sign of activity will mean rest, and more rest.

When complete rest is ordered, the patient is not allowed to read, write, or entertain callers. Complete rest means *complete* rest. If the doctor believes some recreation or light exercise is safe, he will so specify. When the

patient is in doubt and the doctor is not near by, let the patient rest. Nothing in all the months of treatment will require so much intelligent and persistent courage as keeping up an unvarying routine of rest when sometimes one's whole being cries out for something else. The patient must then remember that one hour of hard work or exciting exercise will undo the benefits of a month or more of conscientious obedience of the rules. The results of such a single lapse in the treatment may be fatal; in fact, in thousands of cases it has proved fatal.

## CHAPTER XVIII

### GETTING FRESH AIR

A CONSUMPTIVE patient should aim to spend as much time as possible out of doors. If he cannot be out of doors, he should be in a room so well ventilated that out-of-door conditions are closely paralleled. If a little pains is taken, all of the hours of sleeping and most of the hours of rest may be so spent. Just how to arrange for open-air living must be studied out for each individual case. Invaluable suggestions may be obtained from the pamphlet, *Directions for Living and Sleeping in the Open Air*, or the book, *Fresh Air and How to Use It*, both by Dr. Carrington, which cover the subject more fully than can be done here.

In any instance, it is necessary that the patient be comfortable. This is easy except in extremely cold weather; and by thoughtfulness and preparation comfort may be obtained out of doors even then. If the pa-

tient becomes chilled or uncomfortable, it is better to go to a warm room for a while than to endure any great discomfort out of doors.

#### CLOTHING FOR COLD WEATHER

An article entitled, "A Matter of Clothes," by Anthony Fiala, the Arctic explorer, appeared in *Recreation*, April, 1915. Some paragraphs, descriptive of the clothing worn by him in Arctic exploration, are here reproduced, by permission, because they graphically set forth the principles of dressing for cold weather.

The body is continually sending off moisture. In fact a greater amount of water is given off through the pores of the skin daily than through the activities of the kidneys. A large part of this moisture condenses in the clothing. In cold weather this condensation of moisture becomes a serious matter and the fewer and looser clothes one can wear and still maintain comfort the better. In fact, the less clothing one can do with in any climate the more comfortable he will be—particularly if physical effort is necessary.

In a cold country, if one elects to wear furs,

## 72 Home Care of Consumptives

he should not wear woollens underneath them. The woollens would become saturated with moisture and in time soak the fur garment. When furs are worn, the body depends for warmth on the columns of warm air held between the skin and the body, the fur serving as the receptacle to hold the heated air masses. The fur garment should always be worn loosely so that the moisture can escape through the opening at the neck. It is surprising how comfortable a very light fur garment can be. Heavy furs are not desirable except for wear when one sits quietly a long while—or for sleeping.

My sledging costume consisted of a fur suit made from the summer skin of a two-months-old fawn of the Siberian domesticated reindeer, an exceedingly light, soft hide tanned by the natives. I wore it fur side in. It was cut full and loose and hung down a little below my knees. The neck and skirt were trimmed with wolf skin. A large opening was left for the neck. In the very cold weather I drew the fur close around the neck, but always left a vent for the escape of moisture. The bellows-like action of the hide as I moved about facilitated this. The shirt weighed but  $2\frac{3}{4}$  pounds. Over it I wore a parka of pongee silk. It kept out the flying drift and the wind. During halts I always took off the parka and put on another

and heavier shirt—its fur side out. This shirt was made from the summer skin of a five-months-old reindeer and weighed about four pounds. Over the two shirts worn during rest periods I wore the parka. As soon as the march started again—no matter how cold—off came the heavier skin shirt. This “coat,” as I called it, was always packed away in a bag when not in use.

. . . . .

It will probably cause surprise when I say that I found the fur shirt and parka sufficiently warm while on the sledge trip and that it was not necessary to wear underclothing. Some of my men prefer red woollens—the sailors in particular; they thought that weight meant warmth. And of course they were allowed whatever would make them comfortable.

Because of the condensation in the clothing of body moisture, a heavy, closely-woven wool garment is unsatisfactory in any climate. From a non-conductor of heat it becomes a conductor. The more nearly the wool approximates its original fleeciness the better.

A sweater, or a double sweater, of soft, fleecy, loosely-woven angora or llama wool is the best garment for use in a cold climate if the Siberian reindeer skin cannot be procured. Over this sweater a light, closely-woven pongee silk parka



## 74 Home Care of Consumptives

must be worn (like the hide of the fur) to keep in the heat and keep out the cold. I prepared such an outfit for Professor Parker, which he wore on his Mt. McKinley trip and praised highly. The object of the parka is to provide an envelope for the heat of the body. Silk is to be preferred to cotton, though it can be made of either material. But in any case it should not be waterproofed as waterproofing prevents the escape of moisture.

Cotton absorbs moisture faster and in larger quantities than wool and because of that fact helps to keep an under woollen garment dry. I have used this principle in the construction of a sleeping bag, which consists of a light, very loosely-woven woollen bag constructed somewhat coffin fashion. There are flaps to be folded over the sleeper's shoulders and prevent the constant escape of warm air which would otherwise occur. The outer case is made after the same pattern, of closely-woven, thin cotton khaki. The cotton absorbs the moisture from the inner woollen bag and gives it off to the outer air without lowering the temperature of the inner bag. The bag complete weighs between  $4\frac{1}{2}$  and 6 pounds, according to size, and by actual test has been found warmer than four five-pound army blankets. For very cold climates two interior woollen bags should be used.

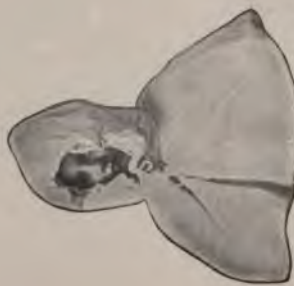


Capotes may be knitted  
or cut out of flannel



Two forms of sleeping bags

Garments suitable for open-air school use, or for sleeping suits  
*Loaned by "Journal of the Outdoor Life,"*



Flannel covering for head and shoulders

To sum up, the purposes of clothing are to take care of the perspiration and, in cold weather, to maintain about the body a layer or coat of air which is kept warm and protects the body from the cold. Loose clothing will hold that layer of air better than tight garments; and wool better than cotton. Cotton worn next to the skin will absorb and retain the moisture, thus chilling the body. A woollen garment, like a sweater, worn on the outside, will afford little warmth; but worn underneath other garments wool will retain more heat than anything else except furs. As the body is constantly passing off moisture and impurities through the skin, the underwear worn during the day should all be taken off at night to air, and must be frequently laundered.

Keep comfortable; but don't pamper yourself with chest protectors, and don't weight yourself down with too heavy clothing. If you cannot wear wool next to the skin, a light-weight linen is better than cotton. The best underwear for summer is light weight and porous, to permit evaporation and the ventilation of the skin.

Open-air sleeping in cold weather presents

## 76 Home Care of Consumptives

two problems in clothing comfort—how to get to the bed without becoming chilled, and how to keep comfortable all night.

For night wear some will prefer a loose union suit, others ordinary garments of outing flannel, possibly with a woollen undershirt underneath. Loose socks will keep the feet warm. To get to the bed without being chilled you will need warm slippers and a bathrobe.

Better, if you can afford it, is one of the sleeping suits which will cover the entire body except the face. They are worn over other sleeping garments, for the sake of cleanliness. Their advantage over sleeping bags is in the avoidance of the slight exposure liable to occur in getting into the bag. The sleeping bags may be worn more or less open about the shoulders, according to the weather. Little additional cover, if any, will be found necessary with either of these devices in moderate winter temperatures.

If you choose to sleep in an ordinary bed, remember that you are as liable to suffer from too little protection beneath as from too little above. Two thin mattresses with a thick layer of newspapers between them will

be found very warm. One or more quilts should be put above the mattress.

It is better to use outing flannel sheets than to sleep between the blankets. The sheets should be made long enough so that they may be turned well back over the other covers. Washable blankets are more desirable than ordinary quilts, which yield little warmth in proportion to their weight; and care must be used that the patient is not wearied by the very weight of the covers. Paper blankets may be bought cheap, and are very warm. Warmest and lightest but most expensive of all bedclothes are eiderdown quilts. Such a quilt is warmer and much lighter than two double blankets. They may be had in large stores at about \$7.00. Ordinary counterpanes should not be used, as they add little to the warmth and considerably to the weight of the covers. Substitute a thin counterpane of washable material.

The difficulty in sleeping in an ordinary bed is in keeping warm about the head and shoulders. The blankets should be long, and well tucked in. Even so, any stirring about during the night will loosen the covers about the shoulders, so that the cold air will creep

## 78 Home Care of Consumptives

in. This may be obviated in part by sleeping with two pillows placed in a V shape, with the head at the apex and the pillows running down under the covers. A garment, knitted or of flannel, to cover the head and come down over the shoulders, should afford sufficient protection. To keep the nose from getting cold, cover it with a pad of cotton, which may be held in place by a strip of adhesive tape stuck to the cheeks. See that the cotton is so adjusted that it will not interfere at all with the breathing.

Avoid being chilled on arising in the morning; and dress in a warm room.

If the light awakens the patient too early in the morning, it may be prevented by tying a light silk handkerchief over the eyes.

The bed may be warmed for the patient, and kept warm during the night, by the use of stone pigs, or rubber or metal hot-water bottles, or by soap-stones or hot bricks.

### SLEEPING ROOMS

Some patients, especially in the city, must continue to sleep indoors. They should choose, if possible, rooms having two or more





KNOX SHEET CO.

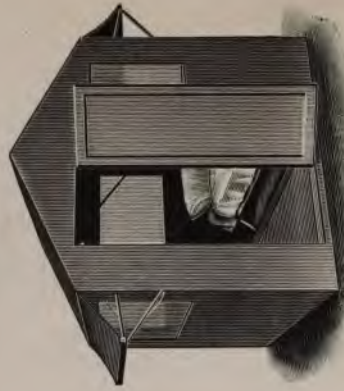


Window tents





Detachable sleeping porch



One form of portable bungalow

windows; preferably, with windows facing two directions. The bed may be so placed as to avoid the strongest draughts, but should not be pushed back to the remotest corner where there is little air stirring. The windows should be opened both top and bottom.

If the patient must dress in his sleeping room, the windows must be closed and the room warmed before dressing time. Under such circumstances the use of a window tent is advantageous. This is a device of canvas, over a folding frame, to insert in an open window and extend over the bed. The patient is breathing out-of-door air. Little air passes into the room, which can be kept at a higher temperature. This makes it possible to use less bedclothing, and to use the same room for sleeping and dressing without having to call anyone to close the windows.

#### SLEEPING PORCHES

Various patent devices may be purchased to attach to the exterior of a house over any window and serve as a sleeping porch. Entrance is obtained through the window, which may be left unaltered or may be cut

## 80 Home Care of Consumptives

down to the floor level for convenience. The window may be kept closed and the room used as usual in the daytime. Their disadvantage lies in the fact that they have room only for the bed. The patient can, therefore, have no company on his porch with him during daytime rest hours; and they are not convenient for taking care of a bedfast patient.

The sleeping porch, if one is to be built, should be at the south-west or south-east side of the house, preferably in an angle so that it is protected on two sides. The second-story level is to be preferred for privacy. It may be built over verandas, or supported by 4 x 4-inch posts run up from the ground. It should provide sufficient space in which to move about and to entertain a caller or two. A minimum of seven by ten feet of floor space is needed where a single bed is used. The cost of the porch will range from fifty to two hundred fifty dollars, according to its size, the quality and finish of construction, and the effort to harmonize it with the architecture of the house.

The floor of the porch should be laid level with the floor of the adjacent room. The



City dwellers can often use flat roofs  
*Loaned by the "Journal of the Outdoor Life"*



Two hoops and some netting afford protection  
*Loaned by the "Journal of the Outdoor Life"*

window should be cut down to the floor level, and if necessary widened to forty-two inches, so that the patient may be rolled to and from the porch in a single bed. The floor should be of matched lumber, laid with a pitch of one inch to five feet. The minimum height from eaves to floor should be six feet six inches. A good roof is essential, with a projection of about twenty inches at the side and end as protection from the rain. The triangular space next to the roof at the end should be provided with lattice work or a window instead of being solidly boarded up, in order to afford thorough ventilation.

The sides should be boarded up between three and four feet from the floor to avoid too great exposure to the winds. The space above should be screened against flies and mosquitoes. Heavy canvas curtains on rollers should be placed on all the sides exposed to the weather so that protection may be had from storms from all directions. Japanese curtains or Venetian blinds may be substituted if the porch is used only in warm weather.

Various comforts will suggest themselves. The cords controlling the curtains may be

## 82 Home Care of Consumptives

run to a point near the patient's head, so that he may lower the curtains in the event of a night storm. An electric bell or telephone may be connected with another part of the house so that some one may be called when necessary.

### SHACKS AND BUNGALOWS

For people of a fair amount of means living in small cities or villages or the country, shacks and bungalows may be used in a variety of ways. Here again Dr. Carrington's book *Fresh Air and How to Use It*, will be of much help.

Portable bungalows in sections ready to set up by any competent mechanic may be purchased from various firms in all sorts of sizes. Some are just large enough to contain a small bed and a little furniture. Others can be divided into five or six rooms. The small ones can be set up in a back yard on a town lot. The larger ones may be used for simple housekeeping out in the woods. A consumptive should buy only those bungalows having a large part of the wall of all four sides open.



A cheap lean-to, with curtains on the two exposed sides  
*Loaned by the "Journal of the Outdoor Life"*





Porch for three beds; dressing room; kitchen-dining room; and a bath room, with seat, stand, and connection with city water and sewage system. Cost, exclusive of lot, \$375

Shacks may be built costing from \$35.00 to \$500.00, or more, at the pleasure of the patient. The lower figure represents the cost of a tiny shack with room for a bed only, erected for use in the summer at an isolated farm house. As neither privacy nor protection against severe weather had to be provided for, all four sides were left quite open except for the wire netting. The larger figure is for a simple cottage type of building constructed on a hill on the outskirts of a small city. Connections with the city water, gas, sewage, lighting, and telephone systems were easily arranged. Three small rooms were enclosed—a bath room, a kitchen-dining room, and a room for dressing and for storing the clothes for the family. These rooms are finished inside with one of the patent composition materials. The porch, roofed, sided up for three feet six inches, screened, and curtained at the ends, is large enough for the four beds of the family, and is the general living room of the family by day. In such a shack an entire family may live in safety, comfort, and generally improving health, though it may be built primarily for the purpose of caring for one consumptive member.

## 84 Home Care of Consumptives

In planning to build such a shack or to use a portable bungalow, choose a site with reference to good elevation and drainage, safe water supply and disposal of all wastes. Put in a safe foundation for your shack, running it down below the frost line. The floor should be double, with building paper between. The structure will be more sightly if a lattice work is built to hide the piers or posts of the foundation. The porch should be sided up three or four feet, and the balance of the space should be screened and curtained, and screen doors should be provided. The roof may be of shingle or tarred paper, and should have a good projection over the open porch space. The enclosed rooms should be finished inside, and may then be heated so that the household may bathe, dress, and dine in comfort.

### OPEN-AIR REST IN DAYTIME

Many incipient or convalescent cases of tuberculosis, able to move about to attend to their own wants and to take light exercise daily, will find it necessary to sleep in an ordinary room at night. Such will desire



A cheap, temporary sleeping porch, with a tent for shelter



Another temporary porch; better built, not too expensive, and in better taste

to spend several hours of the day at rest in the open. For this purpose a porch or roof may be available that is not suited for a sleeping porch.

For such persons a comfortable reclining chair is almost a necessary luxury, especially in winter. In a reclining chair one may lie down to sleep, or sit up at various comfortable angles to rest, read, or write. The feet may be kept off the floor; and in cold weather one cannot keep the feet warm when they rest on a cold veranda floor. Some chairs have racks to hold books or magazines, and wide arms for writing; others have awnings, for use in summer.

A large, heavy blanket is first spread over the chair. The patient, fully dressed, sits down, and the blanket is wrapped about him. If one desires to get up and down frequently, this is inconvenient. Then, a fur coat is a better dress. The feet should be protected with heavy socks, or boots, or arctics. For the hands procure loose woollen mittens, cut off the ends of the fingers, and bind the ends to prevent ravelling. These, worn over loose cotton mittens, will be sufficiently comfortable and will allow free use of the hands.

## 86 Home Care of Consumptives

### DEVICES FOR THE SUMMER

It is necessary to plan for the summer as well as for the winter, though it is not so hard to secure comfort. Porches, shacks, and bungalows are best. Where there is little space and less money, or where the patient is occupying rented property where he does not wish to erect a shack, some cheap method is desirable.

Protection from the direct rays of the sun is necessary. Some may have trees with low limbs and thick foliage under which a reclining chair may be used. Others may be able to get a huge umbrella to fasten to a pole fixed in the ground. Where insects are a great pest, uprights may be fixed to the four corners of a cot to a height of about four feet, and the whole covered over with mosquito netting with a fold or a flap at one side to permit entrance. Tents may be used. It is best to pitch the tent in the shade of a tree, or to use a tent with a double top, as a tent with a single top, pitched in the sun, will be found very hot.

It is almost impossible to keep flies out of a





A good style of porch  
*Loaned by the "Journal of the Outdoor Life"*





A permanent, protected porch, harmonizing with the house. Cost, about \$100

tent; but running an electric fan will drive most of them away.

Remember that as a patient may suffer cold from a thin mattress in winter, he may suffer from the heat with a thick mattress under him in summer.

## CHAPTER XIX

### CARE OF THE BEDFAST PATIENT

UNDER a number of different conditions, the patient at home as well as in a sanatorium should be or must be in bed. Immediately following a diagnosis of tuberculosis, it will be easier for the doctor to obtain an exact idea of the case if the patient will remain in bed for several days so that temperature and digestion may be carefully watched daily. During the course of the fight, there are apt to be days or possibly a few weeks at a time when the digestive tract does not work properly, or when the patient's temperature rises every afternoon to a considerable degree of fever, or when a cold or some other temporary complication sets in. Under such circumstances, the patient had best stay in bed until the condition is materially improved. A patient in the third stage of the disease may have to spend weeks or months flat on his back. Some provision

## Care of the Bedfast Patient 89

should be made for the care of such a bedfast patient in order to preserve his comfort and reduce to a minimum the labour of those who attend him.

Much of the welfare of the patient will depend on the skill with which care is given. Loving care is not enough; it must be skilful as well. There are many little details about arranging the bed and caring for the ordinary comfort of the patient that cannot be graphically explained in any book. The only way in which the members of the family can learn how to give this care is to have some skilled person to show them how. The constant ministrations of a trained nurse would not only add to the comfort of the patient but would reduce the danger of infection to other members of the family. In many homes the expense of keeping a trained nurse for a long period cannot be met. But in a week's time, a nurse can train some members of the family in many of these details.

### THE BED

The ordinary bed is not entirely convenient for caring for a bedfast patient. It is so

## 90 Home Care of Consumptives

wide that handling the patient in the middle of the bed is very difficult; and it is so low that every service requires too much stooping. Where means will permit, the purchase of a hospital bed is desirable.

Hospital beds are made of metal so that they may be kept perfectly clean with the smallest possible amount of labour. Such beds are made about six feet six inches long and twenty-six inches high. A single bed is about thirty-six inches wide. A three-quarters width bed will not add greatly to the work in caring for the patient and, especially in hot weather, will be more comfortable for him. A comfortable mattress is essential, hair mattresses being probably the best.

There should be a plentiful supply of sheets. The sheets should be long enough so that the upper one may be drawn well back over the covers of the bed in order to prevent, so far as possible, infection of the blankets when the patient is not able to cover his mouth while coughing. If the sheets are made sufficiently wide so that the undersheet may be tucked well under the mattress at one side, it may be drawn toward the other side of the bed from

## Care of the Bedfast Patient 91

time to time, thus giving the patient a fresh place to lie on.

Pillows should be small and rather flat instead of large and bulky. Two pillows can generally be made from the feathers in one ordinary pillow. Small pillows may be distributed under the knees or shoulders of the patient or in other ways so as to afford relief from lying too long with the weight continually distributed in one manner. One or two large pillows should be at hand on which the entire back and shoulders of a patient may rest when he is propped up. A disadvantage in ordinary feather pillows lies in the fact that they are very warm to rest on in hot weather; hence the patient may be annoyed by excessive perspiration. Hair pillows will be found cooler and pleasanter under such circumstances.

For bed-clothing, see section "Getting Fresh Air."

Through any druggist one may obtain a back rest to put in the bed and prop the patient up at any angle desired. One of these will add materially to the comfort of a convalescent patient. For temporary use in case of emergency, an ordinary kitchen chair

## 92 Home Care of Consumptives

may be turned upside down so as to form a prop at an angle of about forty-five degrees. On the back rest or the inclined chair, a pillow may be placed on which the patient may rest.

In some instances, the weight of the bed-clothes may become irksome on certain parts of the body, especially the feet. Various home-made contrivances may be fixed so as to lift the bedding. A board may be placed across two piles of magazines placed inside the bed. A barrel hoop may be sawed in half and the ends tied together. One of these placed under the bed-clothing near the feet will elevate the covering sufficiently.

Some patients in the advanced stage of the disease are unable to control the kidneys and bowels. In an emergency of this sort, the mattress may be protected by putting beneath the undersheet several thicknesses of newspapers. Then as soon as possible a rubber sheet should be procured to use under the undersheet. Bedpans and urinals may be procured from any good druggist.

To serve meals to a bedfast patient, one may obtain a tray with short legs to be placed on the bed, or a table to stand beside the

## Care of the Bedfast Patient 93

bed with a platform, adjustable to various heights, that extends over the bed.

### BEDSORES

When a patient is bedfast, bedsores are apt to develop on the shoulders, back, or heels—in fact, wherever the weight of the body rests too long. When bedsores develop, they are healed only with difficulty; and they cause a very large drain upon the patient's strength. Moreover, caring for them is a considerable task. Every precaution should be taken, consequently, to prevent their development.

The sheets should be kept clean, dry, and free from wrinkles. Care should be taken to keep all crumbs out of the bed. The only way to discover the presence of crumbs underneath the patient is by passing the hand under him. The patient who is not too weak to do so will change position occasionally so as to throw the weight of the body from one place to another. If the patient is too weak to move himself, his position should be changed at least once every four hours. When a bedsore is in danger of developing at



**LANE**

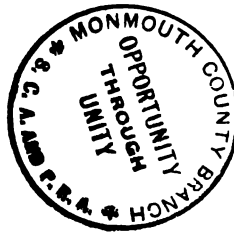
**MEDICAL**



**LIBRARY**

**Gift of:**

**Social Service Department**









# HOME CARE OF CONSUMPTIVES

**BY**

ROY L. FRENCH, M.A.

**FORMER SECRETARY, KENTUCKY TUBERCULOSIS COMMISSION**

**WITH 27 ILLUSTRATIONS**

**G. P. PUTNAM'S SONS**  
NEW YORK AND LONDON  
**The Knickerbocker Press**

## 1916

mp

Figure 1 consists of two scatter plots. The left plot shows a positive correlation between the number of children (x-axis) and the number of mothers (y-axis). The data points are scattered, and a regression line is drawn through them, showing a positive slope. The right plot shows a negative correlation between the number of children (x-axis) and the number of mothers (y-axis). The data points are scattered, and a regression line is drawn through them, showing a negative slope.

**COPYRIGHT, 1916**  
**BY**  
**ROY L. FRENCH**

**The Knickerbocker Press, New York**

YASBLL 3961

F87  
1916

## PREFACE

THE author of this book, a social worker, has been engaged for four years in educational and executive work in the campaign against tuberculosis. In connection with this work he has visited many hospitals, clinics, and open-air schools, and has often accompanied visiting nurses on their rounds, thus coming in personal contact with some hundreds of families suffering from tuberculosis. In addition, he has had the disease within his own home circle. These are his qualifications for the writing of this manual.

The scientist, in preparing a book like this, is likely to search first for the truth, with secondary consideration of its usefulness to his readers. The social worker, on the other hand, asks himself, "For what helpful information will people turn to this book?" Then, as the author has done, he searches out and sets down that information in the simplest possible form. Therefore, in addition to the patients for whom it is primarily written,



this book, with its range of helpful facts, should be of service to tuberculosis workers and visiting nurses, and to teachers, ministers, and clubs interested in the health problems of their localities. Also, those doctors who realize most keenly the necessity of the patient's intelligent co-operation in the details of treatment, will benefit by placing this book in the hands of the family.

The thanks of the author are due to many persons for aid of various kinds in the preparation of his work, but particularly to the following:

The Kentucky Tuberculosis Commission, for permission to use material from their *Home Care of Tuberculosis*, prepared for them by the author for general distribution in Kentucky; to Miss Fannie C. Rawson of the Kentucky Library Commission, for help in making up the bibliography; to Dr. Charles L. Minor, for permission to reprint his "Hints and Helps"; to the *Journal of the Outdoor Life* and the National Tuberculosis Association for information secured from their files; to the manufacturers of various supplies, for illustrations; to Miss Laura Cauble, for permission to reprint from the Kentucky

## Preface

v

publication her chapter on diet; to Mr. Anthony Fiala, for an extended quotation from his article, "A Matter of Clothes," and his reading of the section on clothing; and to the following persons who have read and criticized the entire manuscript: Miss Chloe Jackson, R. N., Executive Nurse, Raoul Foundation, Atlanta, Georgia; Miss Harriet Fulmer, R. N., Extension Secretary, Illinois Tuberculosis Association, Chicago; Dr. John Risk Meek, Physician in Charge, Kenton County Tuberculosis Clinic, Covington, Ky.; Dr. Dunning S. Wilson, Head Physician, Waverly Hills Tuberculosis Hospital, Louisville, Ky.; Dr. Philip P. Jacobs, Assistant Secretary, National Tuberculosis Association, New York City; Dr. Alfred Meyer, Consulting Physician, Montefiore Home Country Sanitarium, New York; Dr. Theodore B. Sachs, President, National Tuberculosis Association, Chicago.

R. L. F.

NEW YORK, May, 1916.



## CONTENTS

CHAPTER	PAGE
I.—WHOM WILL THIS BOOK SERVE? .	I
II.—WHAT ARE THE CONSUMPTIVE'S CHANCES? . . . . .	3
III.—WHAT IS TUBERCULOSIS? THE SOIL AND THE SEED. SYMP- TOMS. INFECTION AND DIS- EASE. HEMORRHAGES. PRE- DISPOSITION, RESISTANCE, AND IMMUNITY. SPECIAL RISKS OF CHILDREN . . . . .	8
IV.—JUST AFTER THE DIAGNOSIS .	18
V.—FUNCTION OF SANATORIA AND HOSPITALS . . . . .	23
VI.—PATIENT AND PHYSICIAN .	25
VII.—MEDICINES IN TUBERCULOSIS .	30
VIII.—CHANGE OF CLIMATE . . .	32
IX.—THE HOUSE FOR A CONSUMPTIVE	39
X.—THE ROOM FOR A CONSUMPTIVE	43
XI.—FLIES AND MOSQUITOES . . .	47
XII.—PERSONAL CLEANLINESS .	50

CHAPTER	PAGE
XIII.—BATHS . . . . .	54
XIV.—RUBS . . . . .	58
XV.—DISPOSAL OF DISCHARGES FROM THE BODY . . . . .	60
XVI.—INFECTION FROM MILK . . . . .	66
XVII.—REST . . . . .	68
XVIII.—GETTING FRESH AIR. CLOTHING FOR COLD WEATHER. SLEEP- ING ROOMS. SLEEPING POR- CHES. OPEN-AIR REST IN DAYTIME. DEVICES FOR THE SUMMER . . . . .	70
XIX.—CARE OF THE BEDFAST PATIENT. THE BED. BEDSORES. BED BATHS . . . . .	88
XX.—ANTISEPTICS: FORMALIN. CAR- BOLIC ACID. CHLORIDE OF LIME. CORROSIVE SUBLI- MATE. COAL-TAR PRODUCTS. SUNSHINE . . . . .	97
XXI.—CLEANING AND FUMIGATING THE HOUSE . . . . .	102
XXII.—GRADUATED EXERCISE . . . . .	109
XXIII.—OCCUPATION AND AMUSEMENT FOR THE ARRESTED CASE . . . . .	112

## Contents ix

CHAPTER	PAGE
XXIV.—THE PATIENT AND THE REST OF THE FAMILY . . . .	116
XXV.—MARRIAGE, PARENTHOOD, AND TUBERCULOSIS . . . .	124
XXVI.—PERIODICAL MEDICAL EXAMI- NATIONS . . . .	126
XXVII.—SOURCES OF ADVICE AND ASSIST- ANCE . . . .	129
XXVIII.—IS THE FIGHT WORTH WHILE? .	134
XXIX.—“HINTS AND HELPS”—BY DR. CHARLES L. MINOR . . .	139
XXX.—“FOODS AND THEIR PREPARA- TION”—BY LAURA A. CAUBLE . . . .	162

## APPENDICES

I.—MANUFACTURERS OF SUPPLIES .	199
II.—HELPFUL BOOKS . . . .	210
INDEX . . . . .	221



## ILLUSTRATIONS

	PAGE
TWO FORMS OF POCKET SPUTUM CUPS .	62
METAL HOLDER AND PAPER FILLER .	62
WIRE-STITCHED CUP USED WITHOUT HOLDER . . . . .	62
COMFORTABLE AND ADJUSTABLE CHAIR .	63
TWO FORMS OF SLEEPING BAGS . .	74
KNITTED CAPOTES . . . . .	74
FLANNEL COVERING FOR HEAD AND SHOULDERS . . . . .	75
GARMENTS SUITABLE FOR OPEN-AIR SCHOOL USE, OR FOR SLEEPING SUITS	75
WINDOW TENTS . . . . .	78
A DETACHABLE SLEEPING PORCH . .	79
ONE FORM OF PORTABLE BUNGALOW .	79
FLAT ROOFS FOR CITY DWELLERS .	80
"TWO HOOPS AND SOME NETTING AFFORD PROTECTION" . . . . .	81



	PAGE
A CHEAP LEAN-TO, WITH CURTAINS ON THE TWO EXPOSED SIDES . . .	82
A PORCH FOR THREE BEDS; DRESSING ROOM; KITCHEN-DINING ROOM; AND A BATH ROOM, WITH SEAT, STAND, AND CONNECTION WITH CITY WATER AND SEWAGE SYSTEM . . .	83
A CHEAP, TEMPORARY SLEEPING PORCH, WITH TENT FOR SHELTER . . .	84
ANOTHER TEMPORARY PORCH . . .	85
A GOOD STYLE OF PORCH . . .	86
A PERMANENT, PROTECTED PORCH, HAR- MONIZING WITH THE HOUSE . . .	87
"MANY NOISY GUESTS MEAN EXCITE- MENT AND FEVER" . . .	118
"A GOOD PORCH FOR THE MOTHER, BUT NEEDLESS EXPOSURE FOR THE CHILD" . . .	119

# **HOME CARE OF CONSUMPTIVES**



# Home Care of Consumptives

---

## CHAPTER I

### WHOM WILL THIS BOOK SERVE?

**T**HIS book is written to give in compact and definite form the best knowledge now available on the home care of consumptives. No theory or practice is here presented that is not known and used by the tuberculosis specialists of the entire world. Information is here brought together that would require an amount of research and reading impossible for the average family.

Thousands of American consumptives cannot hope to obtain hospital or sanatorium care. Certain States make almost no provision for the victims of tuberculosis. Many private sanatoria charge rates beyond the

## 2 Home Care of Consumptives

reach of more than a limited percentage of the people; and many public institutions are planned to care only for the consumptives who are both financially and physically "down and out." Most important of all is the fact that less than forty thousand hospital beds are now available for more than three fifths of a million American consumptives.

The family income of thousands of cases for whom there are no available hospital beds varies between seven hundred and twenty-five hundred dollars a year. Among wealthier people there are many additional cases where sanatorium treatment cannot be obtained or where for various reasons it may not seem best. Among many poorer families accurate knowledge, supplementing devotion and resourcefulness, may work wonders. People belonging to the above-described groups are faced with the question, "What must we do to give this sick member of our family the best possible care at home?"

This book attempts, in the simplest possible language, to answer that question.

## CHAPTER II

### WHAT ARE THE CONSUMPTIVE'S CHANCES?

**A** CENTURY ago when a doctor pronounced a case of sickness to be consumption, in most instances it was rightly considered a death warrant. Today we know that favourable results may be obtained in the treatment of a large proportion of cases of tuberculosis. The first message of this book to the patient is, **HOPE!**

Nature fights steadily with you and not against you. Almost everyone is at some time infected with tuberculosis. Most of us never know that we have been infected because the germs are quietly killed or walled up in the body. It is only when a particularly severe infection occurs or when we are repeatedly infected while in a run-down condition that an active tuberculous process develops. When we are in poor physical condition as a result of overwork, loss of sleep, lack of proper food, worry, vicious

## 4 Home Care of Consumptives

habits, or an attack of some other disease, then the germs of tuberculosis previously implanted in the body get their opportunity to develop.

In some instances, because of the physical, moral, or economic poverty of the patient or because of the advanced stage of the disease before discovery, the case is hopeless from the beginning. But the doctor is justified in holding out hope of improvement or arrest under favourable circumstances, to practically all cases discovered in the first stage, to a considerable proportion in the second stage, and to many individual cases in the third stage.

There are no figures to show what proportion of cases treated in their own homes conquer the disease. The experience of sanatoria is to the effect that roughly one half of the cases admitted in the first or second stages of the disease who take treatment for some months are discharged "apparently arrested."

Some years ago people talked about "curing" tuberculosis. Now we speak of "arresting" the disease. Tuberculosis, a chronic disease, runs over a long period. In practically all cases of improvement the symptoms

## What Are Consumptive's Chances? 5

will almost wholly disappear and the patient will feel reasonably well although the infection still lingers in the body. Many patients, feeling almost well, have attempted, against the doctor's orders, to return to their old duties and habits and surroundings only to find in a few weeks that the disease had returned in a worse form than at the beginning. For this reason physicians speak of "arresting" rather than of "curing" tuberculosis. A case of the disease diagnosed early and treated till arrested is sometimes called an "apparently cured" case after the consumptive has successfully returned for two years to a full degree of normal life. It is not safe for any consumptive to think of himself as arrested, or as cured, until a competent physician has pronounced him to be so.

Here should be noted the curious fact that a consumptive may become well enough to work without being physically healed. Sometimes the disease germs and the healing forces in the body fight a drawn battle. Then under a strict supervision the patient may be able to resume gradually a normal way of living. A perpetual injunction is issued against overexertion, dissipation, undue



## 6 Home Care of Consumptives

exposure to inclement weather, and other unfavourable conditions. But he may be able to earn his living and resume his old social position among his friends. Life may be usefully and happily prolonged for years.

Such a person lives under the danger of a revival of his old disease. But that same quiet, sensible mode of living, which he is forced to follow, is a protection not only against a return of his tuberculosis, but against other diseases as well.

One of the most successful men of the author's acquaintance has for years followed his profession, supported a large family, and moved about in society freely; yet examination of his sputum twice a year has always shown a few germs. An unconquered spirit accomplishes wonderful things.

There is no royal road to success in the treatment of tuberculosis. The patient must bring to his task the enthusiasm and concentration displayed by the average American in playing baseball or making a fortune. Nature lays down the laws of the game. If you follow the rules and play hard and courageously, you have a good chance to win. If you break the rules, you are sure to

## What Are Consumptive's Chances ? 7

lose. Thousands of consumptives deliberately break the rules laid down by the doctor, most often those with regard to exercise, with serious results. Many a hopeless case has said, "If I had followed the doctor's directions, I believe I might have got well." This book will give you an insight into the rules, and it aims to give you also the inspiration to follow them.

## CHAPTER III

### WHAT IS TUBERCULOSIS?

#### THE SOIL AND THE SEED

**B**URN or boil some kernels (or seed) of wheat or cover them with strong acids, and their life is destroyed. Put them in a suitable granary and life is preserved, though they will not grow and produce a crop of their own kind. Plant them in fertile soil and give them sunshine, warmth, and moisture, and they will grow.

The germs, or seeds, or bacilli, of tuberculosis are rather like the wheat. Boiling or burning, or covering them with certain acids, will kill them. Unlike the wheat, however, they will die when exposed to direct sunlight or currents of fresh air for a few hours. When left in a dark, moist place, they do not grow a new crop; neither do they lose life, for they will grow when put into the proper soil. The

## What Is Tuberculosis? 9

proper soil for these germs is the human body, where they have warmth and moisture.

These germs are, indeed, seeds or plants, too small to be seen except through a microscope, and no more able to move about than a tree. When full grown, each germ breaks in two parts, making two germs where there was but one. If not hindered in any way, this process is soon repeated, so that within a month the result would be millions of germs. Outside the body these bacilli are easily killed; inside, they cannot be reached by chemicals without killing or injuring the patient at the same time. Only the forces provided in the body by Mother Nature can combat them.

### THE SYMPTOMS OF TUBERCULOSIS

The principal symptoms of consumption are given below. Any one of them may indicate either tuberculosis or other diseases. If any one persists a month or more without some other evident cause, a medical examination should be sought.

(a) A severe cold which cannot be shaken off, or a continual hacking cough; occasion-

## 10 Home Care of Consumptives

ally spasms of coughing, especially in the morning. Sometimes a person will develop a slight cough which he will not notice for a considerable time but which may be observed by other members of the family.

(b) A gradual, steady loss of weight.

(c) A gradual loss of appetite.

(d) Loss of strength. This may be either a general feeling of weariness or inertia or lack of ambition, or an unaccustomed degree of weariness noticed after climbing stairs or running for a train or any similar sharp exertion.

(e) A slight feverish condition, arising generally somewhere between two and eight o'clock each afternoon. In some cases this condition will last for only a short time daily. This increased temperature is generally accompanied by a more rapid pulse.

(f) Any discharge of blood in the sputum, even though it occur but once and be only a few streaks.

(g) Sweats at night, generally accompanied by a feeling of being cold in the morning. Other symptoms will probably appear before this one, as this commonly indicates that the disease has gone to the second stage.

(h) An unexpectedly slow recovery from an

## What Is Tuberculosis? 11

attack of another disease, such as typhoid fever or grippe.

(i) Hoarseness, huskiness, or any other trouble with the voice that persists for over two weeks in spite of care may indicate tuberculosis. It may prove to be a simple laryngitis instead; but it needs medical attention.

(j) The commonest form of tuberculosis among children is an infection of the glands, sometimes called scrofula. It will be recognized by the growth of hard bunches in the neck, or sometimes in other parts of the body.

(k) Tuberculosis of the bone or joint is commoner among children than adults. Its beginning is often not recognized early because the first stages are often not accompanied by pain. Any stiffness of the joints, or slight pains that at first may be called rheumatism or growing pains, are suspicious symptoms.

### INFECTION AND DISEASE

The germs generally gain an entrance to the body in the air that is inhaled or the food that is eaten. Suppose a group of germs, attached to a tiny mote of dust, is taken into

## 12 Home Care of Consumptives

the nose or throat in breathing. They may be caught in the nose or throat, and cast out; or they may be carried into the little air cells of the lungs; or they may be swallowed. If swallowed, they may be digested or made harmless in the stomach; or they may find their way into glands, lungs, bones, or other organs. If the bacilli gain lodgment anywhere and begin to grow, one is said to be infected with tuberculosis.

They do damage in two ways. Their very growth and multiplication injures the organ in which they grow; and they cast off a toxin or poison, which produces fatigue.

If not resisted, they would multiply, and finally produce death. But the body fights hard for life. The chief duty of the white corpuscles of the blood is to kill disease germs. The healthy body has a sufficient supply of these corpuscles to dispose of any ordinary colony of bacilli. Sick, undernourished people lack an abundant supply, and are easier prey to germ diseases.

If the white corpuscles are unable to kill the bacilli, a tubercle is formed, enclosing the germs and the immediate area affected. A conglomeration of tubercles is a hard lump,

like cheese in appearance, anywhere up to an egg in size. By building a sort of wall about the affected area, Nature tries to limit the extent of the disease. Often at this time other micro-organisms become associated with the tuberculosis germs and make the healing process more difficult.

Various things may happen to tubercles. Small ones may remain in the body unchanged for years or for a full lifetime, the germs inside dying or remaining inert, like wheat in a granary. Sometimes they break up, the material of the tubercle passes off, and a cavity is left. If the vitality of the body is lowered from any cause, the tubercle may break open and the germs may be carried to other parts of the lungs. Then the battle has to be fought all over again; and this time it will probably be more serious than the first, since a larger area is liable to be involved.

Bacilli appear in the sputum only as they make their way into the air passages from broken-down or uncompleted tubercles. In the early stages of the disease, when there may be no such open lesions, there may be no germs in the sputum. In the final stages,



## 14 Home Care of Consumptives

millions of germs may be cast out daily from one or more open tubercles.

### HEMORRHAGES

Hemorrhage from the lungs is almost invariably caused by tuberculosis; but many consumptives never have hemorrhages. The amount of blood discharged at one time may be less than two drops or more than two cups full. They may appear in connection with other symptoms, such as a feeling of discomfort in the lungs; but often no warning is given. Very seldom does the end come while the patient is having a hemorrhage. Often it is the first grave sign of trouble.

Hemorrhage is caused by a break in a blood vessel in the lungs. A colony of germs collects on the outside surface of the blood vessel and impairs its action till the blood breaks through. The patient should inform the doctor about every hemorrhage, but should not worry about the matter till the doctor does.

Hemorrhages are precipitated by excitement and by any kind of overexertion, such as running or uncontrolled spasms of coughing. The wise consumptive will guard himself accordingly.

The consumptive who is overtaken by a hemorrhage should do the following things in the order named:

Refuse to become excited.

Lie down flat on the back on a bed, with the head turned a little to one side and, if desired for comfort, elevated slightly. The arms should preferably be allowed to lie quietly at the sides. The nurse or attendant, if any one is near by, should hold the cup or towel to catch the flow.

Have the nurse or doctor notified.

Take little water and no food except milk, broth, or gelatin, till the doctor has been informed and has prescribed. The thirst which is commonly experienced may be slaked by holding bits of cracked ice in the mouth.

Treatment for hemorrhage will vary with different cases, with reference to the period of rest needed. Obey the doctor with particular care.

#### **PREDISPOSITION, RESISTANCE, AND IMMUNITY**

Any person in a run-down condition, no matter what the cause, is said to be predisposed to tuberculosis. The children of

## 16 Home Care of Consumptives

consumptive parents are liable to be deficient in natural strength and vigour and are, therefore, predisposed from birth.

The body naturally offers resistance to disease germs. In the case of tuberculosis this resistance is increased by proper diet, rest, and the breathing of pure air. Indeed, our entire plan of treating consumption is to build up these powers of resistance. For example, tuberculin does not attack the germs directly, but rather stimulates resistance.

Almost never does a person have smallpox twice. Apparently, a surplus of resistance is built up in the first attack, which makes a quick disposition of any later attack. This condition is called immunity. After other contagious diseases such as typhoid fever, this immunity may last for years. For certain diseases, such as smallpox and typhoid fever, immunity may be artificially brought about for varying lengths of time by vaccination.

We have not yet learned how to produce artificial immunity to tuberculosis. A slight natural infection, successfully overcome, appears to produce some measure of immunity. Later infections, to produce active disease, must be more numerous or more severe.

## What Is Tuberculosis? 17

Some physicians believe that a degree of immunity may be transmitted to children by inheritance from consumptive parents.

### SPECIAL RISKS OF CHILDREN

Many cases of tuberculosis in adults evidently develop from latent infections incurred in childhood. We now know that children are more easily infected than was thought possible some years ago. Moreover, they are naturally subjected to special risks.

Consumptive parents kiss their children thoughtlessly on the lips, or drink from the same cup, or taste from the same spoon the food the child is eating. In addition, the child plays on the floor and may transmit germ-laden dust to its mouth by its hands. The child does not understand its danger and cannot exercise any precautions.

The lesson is obvious. *Consumptive parents must exercise endless vigilance to protect their children.*

## CHAPTER IV

### JUST AFTER THE DIAGNOSIS

**M**ANY people feel that there is something disgraceful in having tuberculosis. There is no reason for this feeling. Some of the best and greatest of men have suffered from this disease. Only when the consumptive is so careless or vicious that he spreads the disease to other people is there anything disgraceful about having tuberculosis.

Because of this false feeling many people, after a diagnosis of tuberculosis by one physician, go to another doctor and say in substance, "Dr. Smith says I have consumption. We have never had it in our family and I don't see how I could have it. The very idea is terrible to me. I wish you would look me over and tell me that Dr. Smith is mistaken."

There are times when it is advisable to change physicians or to call a second physician

in consultation; but it is not wise to go to a doctor and ask him to assure you that your trouble is not tuberculosis. For a variety of reasons some practitioners will accommodate themselves to the desires of the patient, who will then delay treatment until it is too late. When a competent physician has diagnosed you as a consumptive, thank him for his frankness and prepare to fight the disease.

The first requirement is that you start your fight *at once*. Nothing is of equal importance. A delay of a month, even of a week, may make all the difference between a fight of months and a fight of years or even an unsuccessful fight. Don't let the convenience of your employer, the apparent necessity of earning a little more money, or household cares, or anything else, stand in the way of an immediate beginning of the battle. The patient should not say, "I can't begin to look out for myself till such and such things have been done." Instead, he should say, "I must look after myself *now*. What is the quickest disposition I can make of this other matter?"

As soon as a case has been diagnosed, the family should have a council of war to discuss

## 20 Home Care of Consumptives

home arrangements and finances. If it is true incipient tuberculosis in a favourable condition, it may seem best to the doctor to plan for a rather short, decisive battle of a few months rather than a long campaign. This may make possible a sojourn for a few weeks in a good sanatorium, or the temporary removal of the family to a far better location, or some other similar measure. Generally it will be necessary to, plan for a campaign instead of a single battle, and under those circumstances the means of the family may have to be husbanded. If it is necessary to mortgage the home, or postpone the entrance of one of the children to college for a year, or keep the old automobile instead of buying a new one, or make any other sacrifice, let it be done unselfishly and whole-heartedly. Let the struggle begin with faith and hope.

Some years ago a physician took three young men whom he had diagnosed as tuberculous to a Cincinnati specialist to confirm his diagnosis. The specialist said that all three had tuberculosis in the early stages of the disease. After advising the young men he talked privately with the doctor.

"I know exactly what will happen in each

of these three cases. Mr. A. thinks we do not know what we are talking about because he does not yet suffer any pain. He can't believe his condition is serious. He will keep on having a good time every night and working every day till he is too weak to go on. Then he will come back to you when it is too late to do anything for him.

"Mr. B. is convinced that he has tuberculosis, and is somewhat alarmed. As he has plenty of means, I advised him to go to California for treatment in a sanatorium; and he promised to follow my advice. But he will go about it in his own way, in spite of instructions. He will take a leisurely trip out, seeing the various cities and having a good time. When he gets there he will mix in the town and hotel life for a month or so, playing tennis and dancing, before he goes to the sanatorium. So he will put off starting his battle till it is too late.

"Mr. C. will start his struggle at once and will persist in it with deadly seriousness. You will have no trouble in making him follow directions. He will get along all right and will be at work in a couple of years."

The specialist had judged all these cases



## 22 Home Care of Consumptives

exactly right, as events proved. They are typical of the various attitudes that people take after the doctor's diagnosis. Each patient must choose for himself which class he will join.

## CHAPTER V

### THE FUNCTION OF SANATORIA AND HOSPITALS

**S**ANATORIA offer advantages that should be considered before the patient decides on a fight at home.

Tuberculosis sanatoria are generally located where they have some especial advantage, particularly pure air, dry surroundings, and a pleasant outlook. Skilled medical and nursing forces are at hand to study and supervise the case thoroughly and deal with emergencies quickly. The diet is especially adapted to the needs of the sick. The atmosphere is invariably cheerful and hopeful. Good spirits are as contagious as the disease itself, and spread at once to newcomers. The gentle discipline enforced by patients and staff makes the observance of rules easier than at home; and many temptations are automatically removed. Most important is the fact that the danger of infecting other members of the family is removed.

## 24 Home Care of Consumptives

This last danger increases as the consumptive passes to the second or third stage. Where possible, such patients should be cared for in appropriate hospitals, even at the cost of some discomfort and loneliness, unless the home is well adapted in all respects for the care of bed-fast patients.

## CHAPTER VI

### PATIENT AND PHYSICIAN

**I**F you must fight tuberculosis at home, *employ the most competent physician of your locality, give him your confidence, and co-operate with him heartily.* Without competent medical advice you can get nowhere. Go to the best doctor. So far as money is concerned you will receive as generous treatment from the best doctor of your city as from any other.

Do not withhold anything from him. Sometimes patients, through false modesty or through shame at having certain diseases, hide from the doctor conditions which are extremely important.

Accept the doctor's leadership. If he is wise he will tell you, where possible, the reasons for the various directions he will give you. Sometimes it may be impossible for him to explain exactly the reason for some of his directions. Follow them just the same.

## 26 Home Care of Consumptives

It is not wise to discuss with other sick people the nature and symptoms of your disease and the method of treatment adopted by the physician. There are many differences between cases and what may be wise in one case may be unwise in another. You are almost certain to get some bad advice from other sick people; and in addition you are quite certain to spend too much time thinking about yourself.

No doctor knows everything about the diagnosis and treatment of consumption; but any doctor is a better adviser than the village gossips. We are too apt to find fault with all physicians because some of them have been trained in poor medical colleges, or because for various reasons they are incompetent or unwilling to treat consumptives.

A few physicians do not like to handle tuberculosis because they fear the disease themselves. Others, especially some of the older men, regard tuberculosis as almost always hopeless and consequently manifest little interest in their cases. Certain physicians will generally advise their patients to go away somewhere for treatment, *without making thorough inquiry into all the circum-*

*stances, including the patient's financial condition, and without giving the patient definite information about the place recommended.*

By those signs one may judge that he wants to get rid of the case. Another doctor should then be consulted.

Advanced consumption can be often detected at a glance. Incipient tuberculosis of the lungs can be diagnosed only by a careful examination of the chest and back, with the patient stripped to the waist. If your doctor makes a perfunctory examination through your clothes, consult another physician. All cases, no matter what the stage, should be examined thoroughly.

There are many quack doctors. They commonly advertise extensively in the papers. They will guarantee to cure anything within a specified time, for a given sum of money. You can recognize the quack by those signs. Shun him as you would the plague. In some cities there are a few thoroughly incompetent physicians. The other doctors recognize them as such and refuse to have anything to do with them. They often keep up a practice by employing some of the methods of the quack. Avoid such physicians.

## 28 Home Care of Consumptives

The use of strange or mysterious medicines and methods in caring for the sick has an attraction for a large number of people. An occasional physician who is more anxious to make money than to help the sick will make use of this fact and introduce methods in the treatment of tuberculosis which will cause much talk and will serve to advertise and enrich him. Sometimes such a doctor will give tuberculin indiscriminately to all his tuberculous patients without observing carefully the results. Others may use electrical treatments, or vapours to be inhaled, all given indiscriminately to all their tuberculosis cases. Such treatments may actually injure the patient if from no other cause than the unnecessary use of strength in making numerous calls at the doctor's office. When people excitedly claim that Dr. Blank of your city is using a sure cure for tuberculosis,—for instance, some strange foreign serum,—you had better remember that if the treatment were as good as its recommendations, all the other doctors would be using it also.

The essentials in the treatment of tuberculosis are sound medical advice; a plentiful, varied diet of nutritious and easily digested

food; fresh air every minute possible; comfort of body and mind; complete rest while the symptoms indicate activity of the disease; and a gradual resumption of exercise and general activity when the disease has been arrested. A competent physician may direct the treatment for a particular case in a manner different in *details* from that laid down in this book; the treatment prescribed by the physician who is behind the times will be different in some of the *essentials*. If your physician is of that sort, you had better at least call another doctor in consultation.



## CHAPTER VII

### MEDICINES IN TUBERCULOSIS

**S**CIENTISTS have long worked at the problem of developing some preparation that would act as a sure cure for this disease. Some day it may be found. But at the time of publication of this book there is no such existing preparation generally recognized by the physicians of this country.

Especially avoid all patent medicines advertised as cures or remedies for tuberculosis. There are many such preparations with extremely plausible advertisements in the newspapers. The Pure Food and Drug Law is not yet sufficiently strict to enable the elimination of all such concerns. Some of the preparations are positively harmful and none of them is helpful. You had better believe this disinterested book rather than their advertisements. There are very few medicines that will afford you even the slightest benefit. These you should take only on the

recommendation of the physician and strictly according to his directions.

For the relief of certain symptoms, as, for instance, an irritating cough during the night, the doctor will probably be able to prescribe a medicine for you.

Tuberculin is used by some physicians in the treatment of selected cases of tuberculosis with favourable results. It can best be used in hospitals where the effects of its use may be carefully observed. The use of too large a dose results several hours later in an unfavourable reaction with considerable fever. If your doctor uses tuberculin in your case, co-operate with him by keeping a careful record of your temperature, taken at intervals which he will specify. Do not depend on tuberculin to cure you of consumption without the use of all the other methods of caring for yourself.

## CHAPTER VIII

### CHANGE OF CLIMATE

LESS tuberculosis occurs among the residents of certain parts of the country than in other sections; but much of the difference is attributable to causes other than a difference in climate. The old plan of sending all sorts of cases of tuberculosis running about the country from south to north, from east to west, from seashore to mountain, or the reverse, is no longer followed by the well-informed physician. Change of climate is not now considered an essential part in the treatment of tuberculosis.

Certain sections of the country unquestionably have a climate that is favourable for the treatment of consumption. But credit has been given to climate for many "cures" that have been brought about simply by the fact that the patient, who could not or would not take care of himself at home, has done so at the health resort. This is said espe-

cially for the benefit of the man who is forced to take the treatment at home and believes he is being denied some indispensable thing which those at the health resort are obtaining.

Taking the cure in your own locality and climate, while likely to be a slower process, has one distinct advantage. You are relieved of the danger in the reverse change of climate when you return from the health resort to your home. In some instances eastern consumptives who take treatment in the extremely dry section of the south-west or in high altitudes in Colorado find that they cannot return to the damp climates of their former homes. As long as they remain in their western surroundings, they feel well; but immediately upon their return unfavourable symptoms set in. Sometimes this circumstance compels them to take up permanent homes in places where they have "chased the cure." Less difficulty is now being experienced in this matter than was formerly the case, because patients are more generally following medical advice about the time and manner of their returning east.

If you are able to obtain the advantages

## 34 Home Care of Consumptives

of treatment in the best climate without any disadvantages, you should certainly do so. But you should take into consideration a number of factors before going far away from home.

Some western railroads cross the mountains at a high elevation. A consumptive going west, if he has any heart trouble, had better find out the highest point of elevation reached by the railroad he has selected and consult his doctor before risking the trip. The strain of a long, hard, railroad trip is often too severe to be counterbalanced by a good climate. The trip may be undertaken at a crisis in the disease and may result in a dangerous exhaustion. A consumptive beyond the first stages of the disease should not undertake any long railroad or steamship journey alone.

It is bad enough to be homesick when you are healthy. To be homesick when you are ailing and among strangers in a distant place is intolerable. A consumptive may lose more from this cause than he can gain from the best of climates. If you are afflicted with homesickness, you had better stay at home.

An essential part of the treatment of tuberculosis is a proper mental condition and reasonable freedom from worry. For many eastern consumptives the trip to the extreme southwest means an outlay they can ill afford. If the trip must be taken at the expense of worry about money for one's self and for the family left at home, it had better not be taken. Eastern specialists are now advising their patients not to leave for the west unless they have a thousand dollars available for treatment in addition to sufficient funds for a round-trip ticket. In the past a tremendous number of consumptives have been shipped west without even sufficient money to pay for a return trip. This has caused in some sections a congestion of people too sick to work and too poor to pay their way. They have had to call on public or private charity until charity has become exhausted. Naturally in such communities the consumptive without funds is decidedly unwelcome. You had better not add to that number.

Do not go to any city or section reputed to have an excellent climate or sanatoria without first obtaining definite information

## 36 Home Care of Consumptives

about the various expenses, the different institutions or boarding houses, and the possibility of admission to one of them. In the selection of climate be guided by the advice of a physician well informed in such matters; and possibly have the doctor make all the preliminary arrangements for you by correspondence with a sanatorium, physician, or tuberculosis association in the locality selected.

We give below addresses from which you may be able to obtain information concerning accommodations in some of the most widely known American resorts for consumptives. In writing to these addresses or elsewhere for information, it is well to remember two things. Associations, societies, leagues, and their secretaries, generally have insufficient funds to carry on their purely local work. Correspondents should, therefore, enclose at least enough postage to pay for sending the folders and information requested. And secondly, if you are confused by the claims and recommendations of various localities, consider that Chambers of Commerce particularly are not inclined to underestimate the advantages of their sections.

## **Arizona:**

Dr. John W. Flinn, Secretary, State Tuberculosis Association, Prescott.

Mrs. H. Drachman, Secretary, Tucson Public Health League, 347 South 6th Avenue, Tucson.

Chamber of Commerce, Phoenix.

## **California:**

Executive Secretary, State Tuberculosis Society, 1111 Normal Hill Centre, Los Angeles; or at 719 Forum Building, Sacramento.

Chamber of Commerce, Los Angeles.

Chamber of Commerce, San Diego.

## **Colorado:**

Executive Secretary, Rocky Mountain Public Health Association, Room 17 State Capitol Building, Denver.

Chamber of Commerce, Colorado Springs.

## **New Mexico:**

Secretary, Commercial Club, Albuquerque.

Chamber of Commerce, Silver City.

Chamber of Commerce, Santa Fé.

## **New York:**

Secretary, Bureau of Information, 64 Main Street, Saranac Lake.



## 38 Home Care of Consumptives

### **North Carolina:**

Secretary, State Tuberculosis Association,  
Sanatorium.

Chamber of Commerce, or City Health  
Officer, Asheville.

(Some leaflets of general information about  
the climate, towns, and transportation  
facilities of that section from the General  
Passenger Agent, Southern Railroad, Wash-  
ington, D. C.).

### **Texas:**

Secretary, Public Health Association, State  
Capitol Building, Austin.

Chamber of Commerce, San Antonio.

Chamber of Commerce, El Paso.

## CHAPTER IX

### THE HOUSE FOR A CONSUMPTIVE

**I**F you must take treatment in your own home, make up your mind that it is likely to be a campaign of one, two, or three years rather than a short battle, and take account of all your resources and surroundings in preparation for the struggle. If the house you live in is not suitable, move to another one.

The house should not be in a low, damp place, liable to be flooded in high water or constantly enveloped by morning fogs. Railroad yards or manufacturing plants that throw off clouds of smoke or foul odours make unfavourable surroundings.

The house should be at a good elevation. A sandy or gravelly soil is best because it affords rapid drainage after a rain. The house should have some exposure to the sun every day. A home that is entirely surrounded by great trees or by tall buildings is

## 40 Home Care of Consumptives

not a good residence for a consumptive. If it is necessary to live in the city, choose a house that is separated from its neighbours by at least ten feet—preferably more. Do not forget the possibilities in flat roofs, where shacks or tents may be erected. In order to get a dwelling surrounded by ample space for sunlight and ventilation, it may be necessary to move to the suburbs, or the country.

Before moving into any house it is advisable to see whether it is near any large city dump or near a livery stable with big, neglected manure piles. Avoid such surroundings. If a nuisance of this sort intrudes into your locality, protest to the city health department and keep on protesting until the nuisance is abated under existing ordinances, or until the health department is empowered by ordinance to handle such cases.

See that the plumbing of the house is kept in good condition. Offensive odours and even disease may result from defective plumbing.

If you live in the country, be careful about your water supply. Water from deep wells and all-the-year-round springs is usually safe. Water from shallow wells or shallow springs

## The House for a Consumptive 41

and even from brooks is often contaminated. In too many instances the well is near the manure piles or the outbuildings, and at a lower level. Various impurities and disease germs may consequently get into the water supply. A very large amount of typhoid fever in country districts is spread in this way. From the same sources the water of brooks, especially in very hilly regions, is often contaminated near its source.

To make sure of the purity of your well, write to your State Board of Health at your State capitol for a container in which you may send a sample of the water for free examination in their laboratories.

On request your State Board of Health will probably send you free of cost bulletins regarding the construction and care of outbuildings and the disposal of excreta to prevent the possibility of spreading disease. Valuable information on many similar matters may be obtained free, or at slight cost, from the publications of the U. S. Public Health Service, and the Department of Agriculture.

Whatever the situation and condition of your house, make up your mind to use it to

## 42 Home Care of Consumptives

the best advantage. In many instances small porches or flat roofs or open spaces in the yard go unused because the family have not considered what use might be made of them.

Remember that the most important thing is not your surroundings but the intelligence with which you use those surroundings.

## CHAPTER X

### THE ROOM FOR A CONSUMPTIVE

**I**N your home choose a good-sized room for the care of the consumptive patient. Preferably it should have windows on at least two sides, in order to secure the best ventilation. These windows ought to extend close to the ceiling in order that, when the windows are opened from the top, all the air near the ceiling may have a chance to float out. If the windows do not reach close to the ceiling, on hot, still days a pad of air is left near the ceiling which is not changed when the windows are opened.

To avoid too strong draughts in very cold weather, cut a board six or eight inches wide to fit inside the window-frame and put it at the bottom of the window about two inches inside the lower sash. When the lower sash is raised to a height somewhat less than the height of the board, the incoming current of air is thrown upward and dispersed over

## 44 Home Care of Consumptives

the room. Another device which may be used either at the top or the bottom of the window is made by constructing a strong framework of boards to fit in the window directly above the upper sash or below the lower one. An ordinary fly screen may also be used. Over this frame a thin cotton cloth may be stretched and tacked. This will be found especially serviceable in cold weather if the air is full of smoke and dust, for much of the foreign matter will be caught in the cloth. When the cloth becomes covered with dirt, it should be replaced.

The floor should be of hard or painted wood. There should be no carpet on the floor; but small rugs of washable material are allowable. Heavy curtains and similar hangings, which serve largely to collect dust, should be banished. Window shades, and light curtains of washable materials may be allowed, provided the curtains are frequently washed. Knickknacks and ornaments which collect dust and increase housework should also be taken away. A few cheerful pictures may be allowed. Cases of books should not be kept in the room. If the sick person is well enough to read, a few treasured books may be kept

## The Room for a Consumptive 45

near him. It is not wise to loan them to anyone else because books are easily infected and it is almost impossible to disinfect them.

The bed occupied by the patient should be kept away from the walls of the room. A position near the middle of the room or near the windows will give the best ventilation. Draughts may be avoided or modified by hanging a sheet over the head of the bed. And right here you might as well begin to get over your fear of draughts. Draughts are dangerous if the body is not protected, or is overheated and perspiring, but seldom otherwise.

Few houses are built, as they should be, with direct light and ventilation into the clothes closets. In the constant effort to keep the room clean do not forget the closet. All the clothes of a consumptive should be kept separate from those of the other members of the family, and occasionally they should be taken out for sunning and airing.

In sweeping the room be sure that the work is so done that a cloud of dust is not raised. This dust may reinfect the patient or infect other people. The ideal method of cleaning



## 46 Home Care of Consumptives

the room of a consumptive is with a vacuum cleaner.

Otherwise, remove the rugs from the room for shaking and sunning out of doors. Over your broom put a cloth dampened in a one to eighty solution of formalin, or some other good disinfectant. (See section on disinfectants.) This will collect the dust without scattering it through the air. The broom cover should be taken off and washed each time it is used.

Another method to avoid raising dust, when sweeping a hardwood floor, is to scatter a little moistened sawdust over the floor. Dust mops are also sold for use on hardwood floors. For a carpeted floor a newspaper may be moistened, torn into bits, and used instead of the sawdust.

Never use a feather duster or a dry dust rag. These scatter dust through the air. Patent dust rags that take up the dust may be had at many stores. An ordinary dust cloth, moistened slightly with water or oil, will answer the same purpose.

## CHAPTER XI

### FLIES AND MOSQUITOES

**F**LIES may carry the germs of disease from place to place on their feet; and both flies and mosquitoes may disturb the rest of the patient.

Screen your windows to keep out the flies. Kill those that get in. Better than that, see to it that the surroundings of your house are kept clean and prevent the breeding of flies. Flies may breed in heaps of kitchen refuse; but probably 90% breed in piles of horse manure. It takes about ten days for the breeding of flies; and they seldom travel more than a quarter of a mile from the breeding place. To prevent the breeding of flies, covered garbage pails should be used instead of allowing kitchen refuse to accumulate in a heap in the yard. If it is necessary to allow horse manure to accumulate in piles instead of spreading it over the fields every

## 48 Home Care of Consumptives

ten days, sprinkle the edge of the pile every ten days with borax.

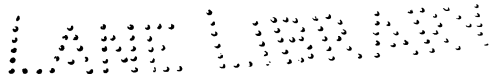
If your neighbour tolerates about his premises filthy conditions that breed flies, complain to the health officer. You may not get any action for a long time because many health officers, in country districts and small towns, do very little beyond drawing their salaries. (They are paid too little to justify one in expecting more of them.) That condition, however, is due to the fact that they have no public support in any effort to maintain clean conditions in the community. Accompany your protest with the assurance that he will have your support in any sanitary measures he finds it necessary to take. When enough people do this to create a real public sentiment, your health officer will act.

To rid a room of flies, darken the room, leaving one small opening to the outer air. With a brush sprinkle about the woodwork a small amount of a solution of one part formalin to ten parts of water. As the fumes from the formalin irritate the eyes and throat, you had better leave the room for some time after using it.

## Flies and Mosquitoes 49

The big wire flytraps are very effective in dealing with the pests.

Mosquitoes are bred in stagnant water. Small pools, ditches, and rain barrels are the commonest breeding places; but the tin can in the back yard, the pool in the clogged gutter on the roof, and other similar places must **not** be forgotten. To rid your neighbourhood of mosquitoes, fill up or drain where possible all the pools and ditches, no matter how small. Ditches and pools which cannot be drained should be sprayed with crude oil, till the top of the water is covered. If repeated a number of times at intervals of about ten days, this method is thoroughly effective.



## CHAPTER XII

### PERSONAL CLEANLINESS

**T**HE danger of spreading the germs of the disease and the work of keeping the room thoroughly clean will both be decreased if the patient will cultivate fastidious personal habits.

The hands should be washed before and after each meal. This reduces the danger of reinfection and also the transfer to other people of germs which the hands may have taken from the lips. The finger nails should be kept well trimmed and carefully cleaned. The use of hot water and soap in cleansing the hands is ordinarily sufficient, without using any disinfectant solution.

The teeth should be cleaned two or three times daily. At least once a day a good tooth powder should be used. Brush the upper teeth downward and the lower teeth upward. Brush the back of the teeth as well as the front. Do not brush the teeth over a

wash basin unless you scrub the wash basin afterward. Keep the toothbrush where the sunlight may strike it. Have a dentist examine the teeth at least twice a year. In order to be perfectly fair, the patient should let the dentist know that he has tuberculosis, so that the dentist may use special care in protecting himself and in disinfecting the instruments.

Avoid putting anything into the mouth except food, drink, and the toothbrush. Many people have an unconscious habit of putting pencils, money, and other objects into the mouth, by means of which the disease may be spread to others.

It is almost impossible to keep the beard and mustache free from sputum. A consumptive should accordingly be smooth shaven.

The patient should, of course, have his individual toilet articles, which for a man include a shaving outfit.

Instead of ordinary handkerchiefs to catch sputum, use cloths or paper napkins, to be burned. Do not keep soiled handkerchiefs in the pockets, as clothes may become infected in that way.

## 52 Home Care of Consumptives

The patient's clothes should be aired and sunned frequently, and should be brushed out of doors.

The patient who is comparatively free from cough and who has strength enough to go to the dining room without any feeling of fatigue, will probably be permitted by the physician to eat his meals with the rest of the family. The entire family should see to it that cheerful conversation is the rule at the table. Worries about money, and personal differences among the other members of the family, should be discussed at some other time. The patient must do everything in his power to see that the meal period is cheerful. He should see that there is no possibility of his infecting other members of the family at table. If he is compelled to cough or expectorate, he should leave the table for the time being. He should have his own napkin. Paper napkins which may be burned are better than linen napkins, which may possibly be confused with others. The dishes used by him at table should be removed to the kitchen separately and any scraps of food left should be burned. The dishes should then be boiled separately before being washed.

It is advisable to keep his dishes separate from the others as an added precaution.

Many patients are able and anxious to help with some of the housework, for instance in the preparation of some of the food for the table. That is perfectly safe for those foods which are to be cooked before they are used. For instance, the patient may shell peas, peel potatoes, or cut up string-beans. He should not, however, prepare for the table such things as strawberries and lettuce, which are to be eaten without being cooked.

For the care of soiled personal and bed linen, see section on disinfectants.



## CHAPTER XIII

### BATHS

THE chief function of the skin is to aid in disposing of the waste products from the body. We are conscious of that process in warm weather because of our perspiration. The process goes on continuously, even in cold weather, unless through neglect the pores of the skin become clogged with the waste products. In that case the other organs of the body are overtaxed to do both their own work and the work of the skin.

Two or three times a week a warm bath should be taken, using any good soap. The patient will, of course, have his own separate soap and towels. The best time for a cleansing bath is just before bedtime. At any rate, it should not be taken within one hour after meal time.

It is to be hoped that shower baths will rapidly take the place of bathtubs in all our

homes. Only a little carelessness and neglect will cause bathtubs to be polluted with all sorts of dirt, and with disease germs if any member of the family is afflicted with a germ disease.

(For bed baths see section, "Care of the bedfast patient.")

Most *healthy* persons will delight in taking cold baths immediately upon arising every morning in the year. This will stimulate a sluggish circulation, quicken the appetite for breakfast, and harden the body to a better endurance of exposure to cold and dampness. In fact, a person who will sleep in the open air and take a cold bath every morning will hardly know what it means to have a cold; and getting the feet wet will lose half its terrors. The best way to take a cold bath is under a shower; and if a shower is not available, the body may be washed quickly with a sponge or a towel soaked in cold water, or one may stand in the bathtub and splash over the body the cold water as it runs from the faucet. It is not advisable to take a cold tub bath. The bath should always be followed by a quick, hard rub with a coarse towel. If one feels stimulated and warm after the rub,

## 56 Home Care of Consumptives

it is evidence that the cold bath is a good thing for him.

The *consumptive* should never venture to take cold baths except on the advice of his physician. If the disease is at all far advanced, or if the individual does not respond quickly to the bath and rub, cold baths may be harmful. If the patient has not been accustomed to taking cold baths, and they are advised, they should be begun gradually, using cool water at first.

Some patients have not sufficient strength to endure an entire cold bath, yet need to be hardened against catching cold, and to be stimulated. Under such conditions the physician may advise the sponge bath of the throat and chest immediately upon arising. To take such a bath, dress partially, leaving the arms, neck, and chest exposed. Quickly bathe the neck and chest, and possibly the arms, and dry with a rough towel.

Some patients find stimulation after a sponge bathing of the neck and chest in standing for a moment before an open window while taking gentle exercises with the arms and breathing deeply.

*The patient should not undertake any of the*

*suggestions given above except on the advice of his doctor.* If a pleasant reaction and feeling of stimulation does not result, the fact should be immediately reported to the doctor who will advise a change of treatment.

## CHAPTER XIV

### RUBS

FOR certain conditions, relief may be obtained by giving the patient rubs of various sorts.

For emaciation and weakness, give first a cleansing bath and then rub the skin gently for about fifteen minutes with olive oil. Sometimes cocoa butter or liquid petroleum may be substituted for the oil. This is particularly good for those patients who find oils and fats objectionable in their food.

In case of excessive night sweats, rub the skin gently just before going to bed with a mixture of 1 part of pure apple vinegar to 4 parts of water.

To reduce fever, to stimulate, and sometimes to afford relief from night sweats, rub with pure grain alcohol or pure whiskey.

The use of witch-hazel as a rub will give pleasure to a patient who is tired from lying for a long time. Witch-hazel has, however,

no particular value as a medicine; it is the rubbing rather than the witch-hazel that affords the relief.

Where the patient suffers from a high temperature, the doctor may be able to prescribe other treatments that may give relief.

For rubs for prevention of bed sores, consult section on the care of bedfast patients.

The fact must be emphasized that rubbing by an unskilled person may give the patient temporary pleasure and relief; but to be of any real value in sickness rubbing must be done by a trained and instructed person. Here again the employment of a trained nurse, at least for a time to instruct the family, will be advantageous.

## CHAPTER XV

### DISPOSAL OF DISCHARGES FROM THE BODY

**T**HE germs of tuberculosis may leave the body of the consumptive in four principal ways: in the spit, in the spray from the mouth in the act of coughing and sneezing, in the discharges from open sores in tuberculosis of the bone or joint, and in the excreta in tuberculosis of the intestines.

*If all germs escaping from the bodies of all consumptives could be caught and destroyed, tuberculosis would become a relatively uncommon disease in less than a quarter of a century.* Consumptives may not only infect others, but they may reinfect themselves. Consequently both self-interest and the interest of others will lead the patient to take every precaution to prevent the spread of the disease. The first two of the ways of disseminating the germs mentioned above are by far the most important.

Some real danger arises when infected

## Disposal of Body Discharges 61

sputum is cast on the sidewalk, as it may then be caught on the shoes of a passer-by and be tracked into the house. But the danger of spreading or contracting tuberculosis through infected sputum in the streets has probably been exaggerated. The action of direct sunlight and fresh air destroys the bacilli or makes them harmless in a few hours.

We know now that the real danger lies not in receiving one casual infection but in repeated infections; and the poorer one's health, the greater the danger. All these facts together indicate that the patient's immediate family and closest associates are subjected to an increasing danger unless unceasing vigilance is shown in collecting and destroying sputum. It is not enough to be careful nine tenths of the time. *All sputum must be destroyed.* Because most cases receive instruction too late, or incompletely, or inaccurately, and because the instructions are often followed carelessly, consumption is a house disease and a family disease.

Under no circumstances should a patient swallow any of the phlegm which he raises



## 62 Home Care of Consumptives

to his mouth. In this manner he may infect his digestive organs.

Often tuberculosis is not diagnosed until the disease is well advanced in the first stage, when germs may at times be plentiful in the sputum. In spite of the doctor's prescription of complete rest, many such patients will continue for some time to work and to carry on ordinary social intercourse. Through the careless disposal of sputum at this period they may menace the health of associates or fellow employees.

The wealthy patient may find ornamental glass or silver bottles which may be inconspicuously carried and used to catch sputum. Less expensive metal flasks, and paper flasks for pocket or handbag, may also be obtained. (See section, Manufacturers of Supplies.)

Waterproof pockets of oiled silk may be procured to put inside a man's coat pocket or in a lady's handbag. A supply of paper napkins or small squares of cloth may be carried in another pocket, used one at a time when needed, and put in the silk pocket, which should be removed and cleansed daily.

One of the best methods of collecting sputum of a housebound patient is the use



Metal holder and  
paper filler



Two forms of pocket  
sputum cups



Wire-stitched paper  
used without  
holder



Chairs should be comfortable and adjustable. Firm, flat backs are better than canvas

## Disposal of Body Discharges 63

of paper sputum cups which can be burned with their contents, or which may be buried or emptied into the water closet if a disinfectant solution has been used in the cup. Some forms of cups are intended for use in metal holders, which should be boiled for a few moments about twice a week. Another form may be so folded as to be used without the metal container.

The use of a sputum cup is difficult for a very weak patient, and is unpleasant for many others. Such should be provided with paper napkins or small squares of cloth. An opened paper bag may be pinned to the bedding so that the used napkins or cloths may be dropped into it. The bag and its contents can be handled without danger, and should be burned. This should be done at least once daily. The patient does not have to lift himself up or turn on his side, as in the use of the sputum box; and only one hand need be drawn from under the covers. This is an advantage in extremely cold weather.

In some cases where the expectoration of an advanced or moderately advanced case is exceedingly profuse, the physician may

## 64 Home Care of Consumptives

possibly permit the use of a spittoon in which some disinfectant is used.

Under any circumstances, when any sputum falls on the floor, it should be covered with some disinfectant solution which should be allowed to stand for several minutes. If sputum gets on the bedding or night gown of the patient, it should be cleaned up at once and, preferably, fresh linen should be put on. Danger arises both from wet sputum and from dried sputum, tiny flakes of which may float in the air.

The second principal mode of spreading the germs is through the spray from the mouth when the consumptive coughs or sneezes. There is very slight if any danger from the ordinary exhalation of the breath. In coughing or sneezing, tiny drops of sputum may be cast in the air, to float about the room and infect other people or the room itself. To guard against this, an ample supply of paper napkins or pieces of cloth should be given the patient to hold over the mouth in the act of coughing or sneezing. These cloths or napkins should be sufficiently large so that the patient's hand is not soiled in using them. Paper bags should be pro-

## Disposal of Body Discharges 65

vided, as suggested above, for their disposal after use. It is not wise for this purpose to use ordinary handkerchiefs.

In cases of bone or joint tuberculosis there may be a discharge of infected matter through an open sore. The physician will give directions as to the care of the affected areas and the disposal of the discharge. In handling any soiled bandages care should be taken that the hands be not soiled; and after the bandages have been disposed of, the hands should be carefully washed.

In intestinal tuberculosis, the doctor will give directions for the disinfection of the excreta by the use of chloride of lime or formalin, as given in the section on disinfectants.

## CHAPTER XVI

### INFECTION FROM MILK

**A**BOUT ninety-five per cent. of all cases of tuberculosis are contracted from other consumptives in one of the ways suggested in the previous section. The remainder, mostly children less than five years of age, get the disease by drinking milk from tuberculous cows.

Milk that is milked from healthy cows by clean, healthy men, is promptly cooled and bottled, and is kept clean and cool till used, is good food; but all of these conditions are necessary. If the milk is not kept clean and cool, bacteria will develop in it rapidly, making it valueless or unfit for food. Milkers convalescing from typhoid may spread an epidemic of the disease through the milk. And some (not all) tuberculous cows give infected milk. For all these reasons a careful supervision of the milk supply is desirable.

The danger of contracting tuberculosis

from milk is greatest for children less than two years of age. Little babies should, therefore, be breast-fed if possible. Where this is not possible, and the doctor advises the use of dairy milk, get certified milk from tuberculin-tested cows; or get pasteurized milk; or pasteurize the milk yourself. Then dismiss the danger from your mind.



## CHAPTER XVII

### REST

**N**O chapter of this book is more important than this brief one.

Just after a diagnosis of tuberculosis, and while any active symptoms persist, the *patient must rest*. The body may generate enough strength daily to do a day's work, or to fight the disease, but not to do both. Keep up hard work or strenuous exercise, and the result is slow suicide.

At some hospitals, patients with high fever or other like symptoms are not allowed to do so much as move their own chairs. As the disease becomes less active, more movement is permitted; but any fresh sign of activity will mean rest, and more rest.

When complete rest is ordered, the patient is not allowed to read, write, or entertain callers. Complete rest means *complete* rest. If the doctor believes some recreation or light exercise is safe, he will so specify. When the

patient is in doubt and the doctor is not near by, let the patient rest. Nothing in all the months of treatment will require so much intelligent and persistent courage as keeping up an unvarying routine of rest when sometimes one's whole being cries out for something else. The patient must then remember that one hour of hard work or exciting exercise will undo the benefits of a month or more of conscientious obedience of the rules. The results of such a single lapse in the treatment may be fatal; in fact, in thousands of cases it has proved fatal.

## CHAPTER XVIII

### GETTING FRESH AIR

A CONSUMPTIVE patient should aim to spend as much time as possible out of doors. If he cannot be out of doors, he should be in a room so well ventilated that out-of-door conditions are closely paralleled. If a little pains is taken, all of the hours of sleeping and most of the hours of rest may be so spent. Just how to arrange for open-air living must be studied out for each individual case. Invaluable suggestions may be obtained from the pamphlet, *Directions for Living and Sleeping in the Open Air*, or the book, *Fresh Air and How to Use It*, both by Dr. Carrington, which cover the subject more fully than can be done here.

In any instance, it is necessary that the patient be comfortable. This is easy except in extremely cold weather; and by thoughtfulness and preparation comfort may be obtained out of doors even then. If the pa-

tient becomes chilled or uncomfortable, it is better to go to a warm room for a while than to endure any great discomfort out of doors.

#### CLOTHING FOR COLD WEATHER

An article entitled, "A Matter of Clothes," by Anthony Fiala, the Arctic explorer, appeared in *Recreation*, April, 1915. Some paragraphs, descriptive of the clothing worn by him in Arctic exploration, are here reproduced, by permission, because they graphically set forth the principles of dressing for cold weather.

The body is continually sending off moisture. In fact a greater amount of water is given off through the pores of the skin daily than through the activities of the kidneys. A large part of this moisture condenses in the clothing. In cold weather this condensation of moisture becomes a serious matter and the fewer and looser clothes one can wear and still maintain comfort the better. In fact, the less clothing one can do with in any climate the more comfortable he will be—particularly if physical effort is necessary.

In a cold country, if one elects to wear furs,

## 72 Home Care of Consumptives

he should not wear woollens underneath them. The woollens would become saturated with moisture and in time soak the fur garment. When furs are worn, the body depends for warmth on the columns of warm air held between the skin and the body, the fur serving as the receptacle to hold the heated air masses. The fur garment should always be worn loosely so that the moisture can escape through the opening at the neck. It is surprising how comfortable a very light fur garment can be. Heavy furs are not desirable except for wear when one sits quietly a long while—or for sleeping.

My sledging costume consisted of a fur suit made from the summer skin of a two-months-old fawn of the Siberian domesticated reindeer, an exceedingly light, soft hide tanned by the natives. I wore it fur side in. It was cut full and loose and hung down a little below my knees. The neck and skirt were trimmed with wolf skin. A large opening was left for the neck. In the very cold weather I drew the fur close around the neck, but always left a vent for the escape of moisture. The bellows-like action of the hide as I moved about facilitated this. The shirt weighed but  $2\frac{3}{4}$  pounds. Over it I wore a parka of pongee silk. It kept out the flying drift and the wind. During halts I always took off the parka and put on another

and heavier shirt—its fur side out. This shirt was made from the summer skin of a five-months-old reindeer and weighed about four pounds. Over the two shirts worn during rest periods I wore the parka. As soon as the march started again—no matter how cold—off came the heavier skin shirt. This “coat,” as I called it, was always packed away in a bag when not in use.

. . . . .

It will probably cause surprise when I say that I found the fur shirt and parka sufficiently warm while on the sledge trip and that it was not necessary to wear underclothing. Some of my men prefer red woollens—the sailors in particular; they thought that weight meant warmth. And of course they were allowed whatever would make them comfortable.

Because of the condensation in the clothing of body moisture, a heavy, closely-woven wool garment is unsatisfactory in any climate. From a non-conductor of heat it becomes a conductor. The more nearly the wool approximates its original fleeciness the better.

A sweater, or a double sweater, of soft, fleecy, loosely-woven angora or llama wool is the best garment for use in a cold climate if the Siberian reindeer skin cannot be procured. Over this sweater a light, closely-woven pongee silk parka

Garments suitable for open-air school use, or for sleeping suits  
*Loaned by "Journal of the Outdoor Life."*



Flannel covering for head and shoulders

To sum up, the purposes of clothing are to take care of the perspiration and, in cold weather, to maintain about the body a layer or coat of air which is kept warm and protects the body from the cold. Loose clothing will hold that layer of air better than tight garments; and wool better than cotton. Cotton worn next to the skin will absorb and retain the moisture, thus chilling the body. A woollen garment, like a sweater, worn on the outside, will afford little warmth; but worn underneath other garments wool will retain more heat than anything else except furs. As the body is constantly passing off moisture and impurities through the skin, the underwear worn during the day should all be taken off at night to air, and must be frequently laundered.

Keep comfortable; but don't pamper yourself with chest protectors, and don't weight yourself down with too heavy clothing. If you cannot wear wool next to the skin, a light-weight linen is better than cotton. The best underwear for summer is light weight and porous, to permit evaporation and the ventilation of the skin.

Open-air sleeping in cold weather presents



## 74 Home Care of Consumptives

must be worn (like the hide of the fur) to keep in the heat and keep out the cold. I prepared such an outfit for Professor Parker, which he wore on his Mt. McKinley trip and praised highly. The object of the parka is to provide an envelope for the heat of the body. Silk is to be preferred to cotton, though it can be made of either material. But in any case it should not be waterproofed as waterproofing prevents the escape of moisture.

Cotton absorbs moisture faster and in larger quantities than wool and because of that fact helps to keep an under woollen garment dry. I have used this principle in the construction of a sleeping bag, which consists of a light, very loosely-woven woollen bag constructed somewhat coffin fashion. There are flaps to be folded over the sleeper's shoulders and prevent the constant escape of warm air which would otherwise occur. The outer case is made after the same pattern, of closely-woven, thin cotton khaki. The cotton absorbs the moisture from the inner woollen bag and gives it off to the outer air without lowering the temperature of the inner bag. The bag complete weighs between  $4\frac{1}{2}$  and 6 pounds, according to size, and by actual test has been found warmer than four five-pound army blankets. For very cold climates two interior woollen bags should be used.



Capotes may be knitted  
or cut out of flannel



Two forms of sleeping bags

## 190 Home Care of Consumptives

### SOME BETWEEN-MEAL FOODS

#### *Milk Porridge.*—

- 1 pint milk;
- 1 tablespoon flour;
- $\frac{1}{2}$  teaspoon salt;
- 4 raisins.

Heat the milk. Rub the flour to a thin paste with some of the milk saved from the pint before it was heated. This cold milk must be added gradually to the flour, to make a smooth paste. Stir this paste into the boiling milk and cook until the raw taste of the flour has disappeared—from  $\frac{1}{2}$  to 1 hour. It must be stirred while cooking. Strain and serve with milk or cream and more salt, if needed. If the raisins are used, tear them into quarters and cook in the milk. Nutmeg is sometimes used instead of the raisins.

#### *Oatmeal Gruel.*—

- 1 tablespoon oatmeal;
- Cold water;
- $\frac{1}{4}$  teaspoon salt;
- 1 pint hot milk.

Mix the oatmeal and salt. Add enough cold water to make a thin paste. Add the hot milk and cook for 1 hour. Strain.

## Foods and Their Preparation 191

### *Indian Meal Gruel.*—

1 tablespoon flour;  
1 teaspoon salt;  
2 tablespoons cornmeal;  
1 quart boiling water.

Mix the flour, meal, and salt; make these into a thin paste with a little cold water. Pour this into the boiling water, stirring until it thickens. Cook over the range ten minutes, then cook at a lower temperature until the desired taste is developed—about one hour.

### *Rennet or Junket.*—

1 qt. warm milk;  
1 tablespoon rennet;  
 $\frac{1}{2}$  tablespoon sugar;  
 $\frac{1}{2}$  glass wine or brandy.

Dissolve the sugar in the milk; when lukewarm stir in the rennet and add flavouring. Cool in moderate heat, and when firm, place it near the ice. It is not necessary to use any flavouring. Nutmeg is sometimes used.

## 192 Home Care of Consumptives

### *Albumenized Milk.*—

White of one egg;  
1 cup milk.

Place the egg and milk in a covered glass jar. Shake until these ingredients are thoroughly blended. It may be sweetened and flavoured. Serve immediately.

### SOME NICE SUPPER DISHES

*Dropped Eggs.*—Fill a pan with boiling water and put it where it cannot reach boiling point again. Add one teaspoon salt to the water. Break each egg into a saucer and slip it into the water. Dip the water over the egg with a spoon. When the white is firm, and a film has formed over the yolk, they are cooked. Take them up with a skimmer, drain, trim off all the rough edges, and serve on slices of toast. Season each egg with salt.

*Baked Egg.*—Butter a small dish, break the egg into it, sprinkle  $\frac{1}{8}$  teaspoon salt over it. Cook in an oven until the yolk is covered with a film. Serve in the dish in which it was baked.

## Foods and Their Preparation 193

### *A Coddled Egg.*—

$\frac{1}{4}$  cup hot milk;  
1 teaspoon butter;  
 $\frac{1}{8}$  teaspoon salt;  
1 egg;  
Pepper.

Beat the egg slightly, add the butter, salt, and pepper. Add the hot milk gradually, stirring until smooth and creamy. This is prepared in a double boiler. Serve on a slice of toast.

An egg may be beaten and added to a cup of tea or coffee.

*Corn Cake.*—Sift together  $\frac{3}{4}$  cups each of cornmeal and flour,  $\frac{1}{2}$  teaspoon each of salt and soda, 1 tablespoon of sugar. Mix with 1 beaten egg and 1 cup of thick sour cream or milk. Bake in muffin pans or single pan, 20 to 30 minutes, according to thickness.

The cornmeal may be scalded with an equal volume of boiling water, left to cool, or over night, and more shortening, 2 eggs, and a little sugar added.

*Ginger Bread.*—Sift together 2 cups of flour,  $\frac{1}{2}$  teaspoon each of salt and soda, and 1 teaspoon of ginger. Mix with 1 cup of molasses and 2 tablespoons of fat, softened in

## 194 Home Care of Consumptives

$\frac{1}{2}$  cup of hot water. Bake 20 minutes or more in a moderate oven.

### *Milk Sauce for Toast.*—

2 cups milk or cream;  
1 tablespoon flour;  
1 tablespoon butter;  
1 teaspoon salt.

Heat the milk or cream in a double boiler. Melt the butter in a small saucepan, add the flour and salt, and when the mixture is smooth add the hot milk gradually. If the sauce is lumpy, cook it until quite thick, then beat it until smooth; more milk must be added if it is too thick. Add more salt, if needed. Pour this sauce over the slices of toast.

### *Egg Toast.*—

1 egg;  
 $\frac{1}{4}$  teaspoon salt;  
1 cup milk;  
Slices of stale bread.

Beat the egg light, add salt and milk. Soak the bread in this until soft. Cook on a buttered griddle, browning both sides. Before

## Foods and Their Preparation 195

turning, a single piece of butter may be placed in the middle of the slice. Serve hot and with a mixture of cinnamon and sugar, if desired.

### A FEW NICE MEAT DISHES

*Meat Stew.*—Neck or breast of pork, lamb, or veal, or inexpensive cuts of beef may be used in this way. Cover bones with cold water and heat slowly. Cut meat in convenient pieces, roll in flour seasoned with salt and pepper. Fry bits of fat, then brown sections of prepared meat and onion, if desired. Put meat in kettle with bones when water is hot.

When nearly tender, add carrot, turnip, peppers, or celery cut in small shapes, about one cup each to one pound of meat.

Potatoes pared and cut in quarters may be added 20 to 30 minutes before serving, and dumplings 10 minutes before serving.

*Escalloped Fish or Meat.*—Equal measures of cooked minced meat, bread crumbs, and white or tomato sauce; or, for one measure of meat, half as much sauce and one-fourth as much buttered crumbs. (Boiled rice or macaroni may be used instead of crumbs.)



## 196 Home Care of Consumptives

Remove all uneatable portions from meat and mince or chop. Put in layers in a buttered dish, having crumbs for the last. Bake until heated through and brown on top.

*Fish or Meat Loaf, or Timbales.*—Remove skin, gristle, and bone from meat or fish and mince fine. Combine with an equal quantity of bread crumbs or stuffing from a baked fish or roast fowl, season as desired, moisten with milk or stock. Add one beaten egg or more to each pint of the mixture. Pack in buttered moulds, steam or bake until firm in centre. Turn out and serve with sauce.

*Meat Loaf in Rice.*—Line a mould with well-cooked rice. Fill with the meat prepared as above. Cover with rice. Steam an hour. Serve with tomato sauce.

### SOME GOOD DESSERTS

*Apple Whip.*—

2 apples;  
White of one egg;  
1 tablespoon sugar.

Cook 2 small apples until soft. Drain and rub through a hair sieve. Beat the white

## Foods and Their Preparation 197

of the egg, add the sugar, and beat in the strained apple. Serve with cream.

### *Rice Pudding.*—

1 tablespoon rice;  
3 cups milk;  
Salt;  
1 tablespoon sugar;  
 $\frac{1}{2}$  teaspoon lemon juice.

Butter a small baking dish or cup. Wash the rice and put it with salt into the dish. Heat the milk and pour half of it over the rice, filling the dish. When it has cooked in the oven about one-half hour, add the sugar and stir carefully, also add more of the hot milk. Cook from  $1\frac{1}{2}$  to 2 hours, and add the milk as it is needed. Use more milk, if necessary. The lemon may be added with the sugar or later. The dish should be kept filled with milk.

*Baked Apples.*—Wipe and core sour apples. Place them in an earthen or agate-ware baking dish and fill each centre with sugar. Measure 1 tablespoon water for each apple and pour it around, not over, them. Bake until the apples are soft, from 20 to 45 minutes, basting them once in 10 minutes. Place

## 198 Home Care of Consumptives

them on a dish and strain the juice; measure it and add one-third cup of sugar for each one-half cup juice. Cook the syrup 5 minutes at boiling temperature and pour it over the apples. When cold, they may be served with or without milk or cream.

*Stewed Prunes.*—Wash  $\frac{1}{2}$  lb. prunes, then soak them in 1 qt. of cold water for several hours. Cook slowly until tender. Add 2 tablespoons sugar for 2 cups prunes, and also a little lemon juice. Cook 5 minutes longer and set away to cool.

## APPENDIX I

### MANUFACTURERS OF SUPPLIES

Below is given an alphabetical list of various articles likely to be of use to consumptives and a list of manufacturers or dealers. Many of these companies have been advertisers in the *Journal of the Outdoor Life*, a magazine which guarantees its advertising. As many firms and products have probably never been brought to the author's attention, the absence of any name from this list should not be taken as adverse criticism.

For reliable disinfectants, see the section on that subject, or ask the doctor or druggist. Such supplies will be carried on hand, or can be ordered, by your druggist. Likewise, the other things can be obtained through your local dealers in similar lines. If you cannot find them in your city, a letter to the company will bring you catalogues, price lists, and the name of their nearest representative. Prices here given do not include transportation, unless otherwise stated. In most instances, discounts will be allowed on large orders to institutions.

## 200 Home Care of Consumptives

The *Journal of the Outdoor Life*, 287 Fourth Avenue, New York, will gladly advise any one where any article desired for or by a consumptive can be obtained.

### *List of Articles*

- Bungalows. 8, 15, 18, 22, 29.  
Chairs and cots. 4, 10, 14, 15, 17, 20, 23, 25, 27.  
Clothing of all kinds. 3, 6, 9, 11, 13, 17, 20, 25, 27, 30.  
Conveniences and comforts of various kinds. 4, 6, 10, 12, 17, 20, 24, 27, 31.  
Detachable porches, and awnings. 1, 2, 8, 16, 19.  
Hot-water bottles, various kinds. 7, 12, 17, 20, 27.  
Sputum cups, all varieties. 5, 10, 12, 17, 21, 26, 28.  
Window tents. 6, 17.

### *List of Manufacturers*

#### (1) **Aeroshade Company, Waukesha, Wisc.**

Splint-Fabric awnings, porch shades, and window ventilators, of various grades and a wide variety of colours and sizes. Their no-whip porch shades are intended especially to transform any porch into a sleeping porch with suitable privacy.

(2) **American Porch Construction Works, South Bend, Ind.**

The Mitchel Porchet, steel framework, to be attached to any kind of building, with springs, mattress, and awnings. Three widths. Each, \$78.50-\$88.50.

Shipping weight, 180-400 lbs. . Freight extra.

(3) **Babcock & Shannon Company, 52-54 James St., Albany, N. Y.**

"Adirondack" coat, heavy duck, lined with sheep pelt, 35 inches long, sizes 38 in.-50 in. Each, \$8.00, express paid.

(4) **Bloch Go-Cart Co., 1134-1148 American St., North, Philadelphia.**

Wheel chairs and reclining chairs, for cripples and invalids, in a variety of designs, at various prices. Write for catalogue and discount rates.

Reclining chairs, oak caned. . Each, \$9.50 and up.

Adjustable bed rests, with and without arms and head rest. Each, \$2.50-\$3.40.

Bed trays. Each, \$2.00.

(5) **Burnitol Manufacturing Company, 37 North Market St., Chicago, Ill.**

Pocket Sputum Flasks (containing absorbent cotton).

Per 100 \$2.00

Sputum Cup No. 2 (with paper cover and may be used without metal holder). Per 100 \$1.50

Sputum Cup No. 4 (for use in metal holder). Per carton of 200 \$1.60

Sputum Cup No. 5 (for use with metal holders).

Per carton of 200 \$2.00

Carriage extra.

## 202 Home Care of Consumptives

(6) **Cabinet Manufacturing Company, Quincy, Ill.**

Window tents, for single and double beds, of various sizes, qualities, and shipping weights. Each, \$5.00-\$15.00

Flannel sleeping capote, to cover head and shoulders.

Each, \$1.50

Sleeping garments for men, women, and children, for sleeping in the open air in cold weather.

Each, \$ .75-\$5.00

Also electric pads, air moisteners, and other comforts and devices for outdoor sleeping and resting.

Carriage extra.

\* (7) **A. S. Campbell Co., 284 Commercial St., Boston, Mass.**

Metal hot-water bottles, 2, 3, or 5 pint sizes.

Each, \$2.00, \$2.50, \$3.00

Carriage extra.

(8) **Close-to-Nature Co., Colfax, Iowa.**

Collapsible canvas houses, framework of wood and metal. Eight sizes, from 7½ x 6 ft. to 12 x 24 ft. Each \$24 up to \$111 according to size. Weights, 120-450 lbs. Screens, extra, \$2.25-\$6.00. Floors, made in sections, extra, \$3.00 to \$24.00. Weights, 75-480 lbs.

Sleeping balconies may be affixed to any house over any window. 6½ x 4½ ft. Shipping weight, 330 lbs. Each, \$48.00.

(9) **Dr. Denton Sleeping Garment Mills, P. O. Box 23, Toledo, Ohio.**

Hoods for outdoor sleeping, 2 sizes only. Each, \$.50

Also, sleeping garments for children.

Carriage extra.

**(10) The Howard Company, Moores, Pa.**

Paper bags, various weights.	
Per 1000	\$ .45-\$1.50
Per 100	\$ .20 and up
Paper blankets.	Each, \$1.50-\$1.90
Pocket paper cups.	
Per 1000	\$6.00-\$10.00
Paper napkins.	
Per 1000	\$ .40-\$ .80
Reclining chairs	Each, \$1.50-\$10.50
Absorbent cotton, per pound	\$ .20
Clinical thermometers	Each, \$ .40-\$ .50
Metal cup containers	Each, \$ .20-\$ .30
Sputum cups.	
Per 1000	\$3.50-\$7.00
Per 100	\$ .50-\$ .90
Carriage extra.	

**(11) F. C. Huyck and Sons (Kenwood Mills), Albany, N. Y.**

Sleeping bags, \$7.00-\$10.00. Canvas cover, \$4.00.  
 Rugs, with or without detachable hoods, \$8.00-\$10.00.  
 Rugs for open air school use, \$6.25-\$6.75.  
 Bed blankets, per pair, \$7.00-\$9.00.

**(12) Hy-San Company, 20 Stedman Building, Denver, Col. (Prices include postage).**

Paper sputum cups, per hundred, \$.85.  
 Also, thermometers, stone pigs, etc.

**(13) Dr. Jaeger's Sanitary Woollen System Co., 395 Fourth Ave., New York. (Prices include parcels post charges.)**

Hoods for outdoor sleeping, \$1.25-\$2.50  
 - Combination sleeping bag and blanket, \$15.00-\$25.00



## 204 Home Care of Consumptives

Also, sweaters, woollen sheets, bed socks, combination sleeping suits with feet, and many other products.

(14) **Kalamazoo Sled Co., Kalamazoo, Mich.**

Lawn chairs (folding, adjustable), hardwood frame, canvas back. Weight, packed, about 20 lbs.

Each, \$1.00-\$1.90

Swinging lawn chairs, adjustable, with or without awning, weight 32-38 lbs.

Each \$4.50-\$6.50

Reclining house chair, weight 40 lbs.

Each, \$10.50-\$24.00

Express extra.

(15) **R. L. Kenyon Co., Waukesha, Wisc. (Carriage extra.)**

Outdoor sleeping houses and bungalows, wood frame and floors, duck walls and double ceilings, screens, chimneys, etc. Sizes, one to five rooms. Shipping weight, 450-2200. Prices, \$62.50-\$325.00. Wall board interlining, about 25% extra.

Also cots (\$1.80-\$3.50); reclining chairs (\$1.15-\$1.75), camp furniture, toilets, etc.

(16) **Kewanee Manufacturing Company, Kewanee, Illinois.**

Outdoor sleeping berths, attachable to any house, \$45.00-\$50.00.

Screens for same, \$7.50-\$11.00.

Winter curtains, \$2.50.

(17) **Kny-Scheerer Co., 404-410 West 27th St., New York City.**

Glass and porcelain sputum cups, easily cleaned, adapted to home use of ambulatory consumptive,

Each, \$ .20-\$ .60

7 different forms of glass and metal sputum cups, to be carried in the pocket of the ambulatory consumptive,  
Each, \$.35-\$3.00

Tin flask, for use with paper containers,  
Each, \$.15

Paper fillers for the above, per dozen, \$.18

Pocket flask of paper, with flap, Per 100 \$1.50

Metal sputum cups, with handles, Each, \$.30

Paper containers for same, Per 100 \$1.00

Window tents (from designs by Dr. S. A. Knopf).

For use in windows 30 in., 35 in., or 40 in. wide, over beds 36 in. wide, Each, \$10.00  
(Special widths or lengths, to order, at higher prices.)

Reclining chairs, with folding arm rests, without mattress,  
Each, \$25.00

Knitted hoods, covering head, neck, and chest,  
Each, \$2.25

Sleeping bag and blanket combined, Each \$26.00

Water bottles, of rubber and metal, and soapstones, of various sizes and prices.

Rubber air cushions, round, according to size,  
Each, \$1.70-\$3.20

Bedside tables  
Each, \$5.00-\$10.00

Bed trays,  
Each, \$2.00-\$3.50

Back rests, adjustable to various heights, steel or wooden frame, with or without arm rests.

Each, \$2.00-\$6.00

**(18) Kolb Portable Building Company, 30 Church St., New York.**

Sleeping houses, partially sided, screened, but without curtains, in various sizes, \$70.00 to \$186.00, F. O. B. St. Louis.

## 206 Home Care of Consumptives

**(19) Korff Manufacturing Company, Lansing, Mich.**

Hanging sleeping porches, steel frame, canvas top,  
adjustable to any house. Each, \$50.00-\$60.00  
Freight prepaid east of the Rockies.

**(20) W. C. Leonard & Co., Saranac Lake, N. Y.**

Collapsible, adjustable, reclining chair, hardwood  
frame, canvas back, Each, \$2.50

Reading board, \$1.50 extra.

Cushions, \$2.85 extra.

Collapsible, adjustable, reclining chair, with springs  
and mattress, each according to quality and special  
attachments, \$15.00-\$25.50

Stone pigs. Each, \$1.00

"The Black Knight," a device to shade the eyes for  
early morning or daytime sleeping, and to protect the  
nose from the cold. Each, \$.25

Outdoor sleeping suits, with separate hoods and  
covering for the feet. Each, \$2.75 and up

Also sweaters, socks, union suits, moccasins, foot  
warmers, and various comforts for cold weather use.

**(21) Meineke and Co., 66 Park Place, New York City.  
(Postage Paid.)**

Glass pocket sputum bottle with cork, each, 20c.

Sputum cup holders; wire, 10c. each; white enamelled,  
50c. each.

Paper cups with covers, to be used with these holders,  
carton of ten, 25c.; 5 cartons, \$1.00; 1000 cups, \$13.50.

**(22) National Screen Co., 108 South Robert St., St. Paul,  
Minn.**

"The Hygiene Cottage," steel frame, sides of screens  
in panels, open full length or upper half, canvas curtain

sides and double canvas roof. Floor not supplied. 10 sizes, floor space 80-240 sq. ft., shipping weight 600-1500 lbs.

Each, \$115-\$215

Freight extra.

(23) **National Spring Bed Co., New Britain, Conn.**

Utility Wall Bed (attached to wall, and may be folded up during day to permit use of full porch floor space).

Each, \$6.00-\$7.00

Mattress extra.

Wildwood recliner, metal frame, wooden arms, adjustable back, Each, \$15.00

Cushions \$5.00-\$6.00 extra.

(24) **Night Manufacturing Co., 9 Harvard Square, Cambridge, Mass.**

A device to protect the eyes of open air sleepers from morning light; postpaid. \$ .25

(25) **Rogers Peet Company, 842 Broadway, New York City.**

Fiala Sleeping Suit, grey, shaker knit llama wool, with hood, mittens, and feet. Two to fourteen years, \$7.00 to \$10.00. Adult sizes, 32 to 46, \$15.00. Is put on like a combination suit. To be worn over pajamas.

Fiala Sleeping Bag, made of a combed wool, material similar to the sleeping suit, two sizes (children and adults) \$12.50-\$20.00. To be worn over ordinary sleeping garments, or, in bitter weather, over the Fiala Sleeping Suit.

Fiala Sleeping Bag Cover, khaki, to be used over the bag, to add to warmth, and keep the bag clean and dry.

\$3.75

Sitting out rugs.

\$5.75-\$6.75

Wool socks and stockings, blankets, sweaters, coats

## 208 Home Care of Consumptives

lined with wool, rubber ponchos, mittens, gloves, caps, toques, pajamas, underwear, various qualities and prices.

Outfits for open air schools:—

Fiala parkas, hooded, to wear over sweaters,	\$3.50
Fiala outdoor school sweaters,	\$6.00—\$9.00
Folding cots,	\$2.50—\$3.50

**(26) Seabury and Johnson, 59 Maiden Lane, New York City. (Prices include postage.)**

Metal frame, for sputum cups, with lid, each,	25c.
Paper fillers, per 100,	\$1.00.
Paper pocket cups, containing absorbent cotton, carton of 20, 45c.; 100,	\$1.00

**(27) Geo. L. Starks Co., Saranac Lake, N. Y.**

'Rondack recliner, with springs and cushion, shipping weight 95 lbs.	Each,	\$14.85
(Newspaper rack and automatic adjuster, extra.)		
Self adjusting reclining chair, shipping weight 50 lbs.	Each,	\$11.75
Stone pigs (sent prepaid).	Each,	\$1.00
Woollen blankets, various qualities, weights, sizes, and colours.	Each,	\$4.00—\$10.00
Also, swinging couches, air beds, bedside tables, sweaters, caps, bath sprays, etc.		
Carriage extra, unless otherwise specified.		

**(28) Stone & Forsyth Co., 67 Kingston St., Boston, Mass.**

Sputum cup holders, lacquered.	Each,	\$1.12
Sputum cup holders, nickel plated,	Each,	\$1.15
Fillers, wire stitched, in hundred lots,	Per 100,	\$1.00
	Per 1000,	\$8.00

## Appendix I

209

Fillers, flat	Per 100,	\$ .75
	Per 1000,	\$6.00
Hygienic pocket flasks, paper,	Per 100,	\$1.25
	Per 1000,	\$10.00
Paper blankets,	Each,	\$ .75
Fumigating tape,	Per roll 300 ft.,	\$ .20
Paper napkins,	Per 1000,	\$ .75
Carriage extra.		

**(29) Strong Bungalow Company, Hartford, Conn.**

Portable bungalows. Floor shipped in sections, wooden framework knocked down, sides and top of canvas; screens for numerous openings. Shipping weight, 480 lbs. up. Six sizes, from 7 ft. x 10 ft. to 21 ft. x 28 ft. Each, \$70.00-\$325.00.

"Double-decker" bunks and partition screens, extra.

Freight prepaid to Pennsylvania and States north and east.

**(30) Way-a-Head Company, Carthage, Ill.**

Sleeping caps of canton flannel or lined corduroy, \$.75-\$1.50 postpaid.

**(31) West Disinfecting Company, 12 East 42d Street, New York City.**

Paraform fumigators (releasing formaldehyde), one to eight ounces, \$.35-\$1.50

Also disinfectant preparations.

## APPENDIX II

### HELPFUL BOOKS

The following books will be found of value to various groups of people—to social workers, teachers, ministers, and others seeking general knowledge about tuberculosis; and to patients, and those who care for patients. They can be procured through your local book dealer, or through the *Journal of the Outdoor Life*, 287 Fourth Avenue, New York City. Add to your money order 10 per cent. of the cost of the book for postage, unless the book is marked post-paid.

#### *Nurses and Nursing*

DELANO AND McISAAC. *American Red Cross Text Book on Elementary Hygiene and Home Care of the Sick*. Pp. 150 and index. 1914. \$1.00.

Contains discussion of bacteria and the causes and transmission of disease; most important facts about food, water, air, and disposal of excreta; chapters on care of the house, the laundry, personal hygiene, care of babies, beds and bed making, sick room appliances, symptoms of diseases, and the family medicine closet. List of reference books, and 21 recipes of dishes for the sick.

## Appendix II

211

A book of general information, simple, accurate, covering a wide field. Little of specific reference to tuberculosis.

ELLEN N. LAMOTTE. *The Tuberculosis Nurse; Her Function and her Qualifications*. Pp. 286+6. 1915. \$1.50.

"A Handbook for Practical Workers in the Tuberculosis Campaign." Discusses the qualifications necessary for successful work as a visiting tuberculosis nurse, her relation to her superiors, to other organizations and institutions, and to her patients. Should be in the hands of every visiting nurse and board employing nurses. Chapters on the relation of the nurse to the family valuable also in the hands of the patient and family.

ISABEL MCISAAC. *Hygiene for Nurses*. Pp. 201 + 7. 1908. \$1.25.

Though intended as a first book for nurses, those chapters on food, air, soil, sewerage, garbage, causes and dissemination of disease, personal, household, and school hygiene, hygiene of occupation, disinfection and quarantine, are not too technical, and are equally important for the housekeeper. They are scientific, clear, and very practical.

A. C. MAXWELL AND A. E. POPE. *Practical Nursing*. 1915. \$2.00. 3d Edition. Revised and Enlarged. Illustrated.

A text-book for nurses and a handbook for all who care for the sick. Very little attention to tuberculosis; but there is much valuable material on ventilation, disinfection, and the general care and comfort of the sick. Written from the hospital point of view, it assumes greater facilities for the care of the sick than exist in the average home, and is necessarily too technical for many



## 212 Home Care of Consumptives

who must care for occasional cases of sickness in the home. An excellent handbook for the "practical" nurse to study.

AMY E. POPE. *Home Care of the Sick (Lib. of Home Econ., American School of Home Economics)*. Pp. 184 + index. \$1.50.

An exact, fairly simple, and valuable book, accurately described by its title. Symptoms of contagious diseases; suggestions as to the choice and care of sick room; bed-making and handling the patient; baths, the taking of pulse and temperature; giving medicines; disinfectants; child-birth; first aid to the injured; many recipes; and special chapters on the four chief contagious diseases. Good illustrations.

### *Foods and Cookery*

MABEL BAKER. *Sick-Room Cookery Simplified*. Pp. 150. 1914. \$.60.

Twenty-five pages of general matter about the values, uses, and limitations of various foods, and about five hundred recipes. Prepared by an English nurse, for use by other nurses and those who must care for the sick, it contains many suggestions for tempting the appetite of the convalescent.

FANNIE M. FARMER. *Boston Cooking-School Cook Book*. Pp. 616 + 32. 1913. \$1.80.

Thirty-eight chapters on all chief parts of diet, from soups to confections. Time tables for cooking; menus; several hundred recipes; and 125 illustrations. This is a general cook book intended for the use of people of moderate incomes. No particular attention is paid to diet for the sick.

## Appendix II

213

**FANNIE M. FARMER.** *Food and Cookery for the Sick and Convalescent.* Pp. 279 + 26. 1913. \$1.60.

About seventy pages of general material on foods, their values, and the general principles of preparation, with special attention to the feeding of young children. Several hundred recipes of all kinds. A very valuable book.

**WINIFRED S. GIBBS.** *Food for the Invalid and Convalescent.* Pp. 81. 1912. \$.75.

A compact, useful book of directions as to how to choose, combine, and cook foods for the sick, with attention to cost and nutrition. Nearly a hundred recipes; several daily menus.

**EDITH G. HARBISON.** *Low Cost Recipes.* Pp. 203 + 5. 1914. \$.75.

Over four hundred recipes, from soups to cakes, using for the most part the cheaper and more easily obtained food materials.

**SARAH C. HILL.** *Cook Book for Nurses.* Pp. 70 + 6. 1912. \$.75.

Two hundred fifty recipes of dishes particularly for the sick and convalescent, with some special diets. Condensed, simple, explicit, sensible, intended for use by nurses, it is valuable to any one.

**KINNE AND COOLEY.** *Foods and Household Management.* Pp. 400. 1914. \$1.10.

A thorough work on foods—their various values, their proper combination in the diet of healthy people, and their preparation for use, with about one hundred fifty recipes. No especial attention is paid to dishes for the sick.

## 214 Home Care of Consumptives

LINCOLN AND BARROWS. *Home Science Cook Book*. Pp. 266 + 15. 1902. \$1.10, postpaid.

Recommended by Miss Laura Cauble as the best cook book for general home use. Two hundred twenty-eight pages of recipes and directions for cooking dishes, mostly suitable for families in moderate circumstances. Suggested menus for each day for a year.

MRS. M. A. PEQUIGNOT (MARY A. BOLAND). *Handbook of Invalid Cooking*. Pp. 318+8. 1912. \$2.00

Seventy-two pages of explanatory lessons. Brief chapters on serving, on feeding children, and on district nursing. Rest of the book in recipes.

A. F. PATTEE. *Diet in Disease*. Pp. 445. Tenth edition, 1916. \$1.50.

Written by a nurse, for nurses and the general public, it contains some discussion of the principles of diet, about five hundred recipes, and mention of the foods to be used or avoided for many diseases. Very little matter pertaining especially to tuberculosis.

WILLIAMS AND FISHER. *Elements of the Theory and Practice of Cookery*. Pp. 319 + 28. 1901. \$1.00.

Intended for use as a text in domestic science for girls in the upper school grades, it gives plain directions for cooking all kinds of dishes used in the average family in moderate circumstances, with explanations as to why things are done. Many recipes. Little space given to diet for the sick.

### *Books of Miscellaneous Interest*

W. H. ALLEN. *Civics and Health*. Pp. 403 + index. 1909. \$1.50.

The relation of health to civic problems and good

government, with special reference to school children and school conditions, and with the accent placed on definite knowledge and the prevention of disease. Should be in the hands of every teacher, and every person who wants to "do something" for his own community.

DR. THOMAS S. CARRINGTON. *Fresh Air and How to Use It*. National Tuberculosis Association. Pp. 241 + 9. 1912. \$1.00.

Covers the entire subject of ventilation and the making and use of all kinds of devices by which the sick or well may obtain fresh air. The use of rooms, tents, permanent or temporary sleeping porches and cottages. Chapters on planning houses for the future; on roof playgrounds; and on clothing, bedding, and furniture. One hundred fifty illustrations.

DR. THOMAS SPEES CARRINGTON. *Living and Sleeping in the Open Air*. National Association. Pp. 25. 1912. 2c.

This very practical pamphlet by an authority shows how yards, porches, and roofs may be used in taking the "cure." Illustrated. Cost covers postage only.

DR. LAWRENCE F. FLICK. *Consumption, a Curable and Preventable Disease*. Pp. 295. 1914. \$1.00.

A book covering the whole subject for the layman. No illustrations. Chapters on predisposing factors, and the spread of consumption in schools, workshops, etc., are particularly interesting. Chapters on care would be more helpful if somewhat more detailed.

THOMAS C. GALBREATH. "T. B. Playing the Lone Game Consumption." *Journal of the Outdoor Life*. Pp. 74.

## 216 Home Care of Consumptives

1915. Paper, 25c.; Cloth, 50c.; Paper, with the *Journal of the Outdoor Life* for one year, \$1.00. All three prices, postpaid.

The story of a Maryland educator who contracted tuberculosis and "chased the cure" in Colorado; his mistakes and successes. Written by a layman, for laymen, it is a plain, simple story calculated to encourage as well as warn other consumptives. For its optimism and sound philosophy, it deserves a reading by all his fellow sufferers.

DR. JOHN B. HAWES. *Consumption*. Pp. 107. 1915. \$.50.

Dr. Hawes has had a wide experience with tuberculosis patients. His book, a general discussion of the principal facts concerning tuberculosis as a disease of the individual, is recent, compact, simple, and authoritative. Several illustrations.

A. J. JEX-BLAKE, M.D. *Tuberculosis*. Pp. 231. 1915. \$1.00.

No illustrations. A general book for a general public, written from the point of view of an English doctor. Recent, authoritative, sensible, and fairly simple.

SHERMAN C. KINGSLEY. *Open Air Crusaders*. Pp. 128. 1913. \$.25.

Thirty-five pictures and charts. Open air schools; the reason for them, their relation to the children, the home, the rest of the school system, and their results. Particular reference to Chicago, where much advance work has been done and several schools are in existence.

DR. S. A. KNOFF. *Tuberculosis, A Preventable and Curable Disease.* Pp. 382 + 12. 1913. \$2.00.

A work for the general public by one of America's leading physicians. Covers the entire ground—tuberculosis as it affects the patient, the family, the community; the duties and opportunities of the patient, the family, the doctor, the health department, the employer, the teacher, the minister, the philanthropist, the general public; with 115 illustrations. A simple and authoritative book.

National Tuberculosis Association. Standard Pamphlet. *What You Should Know about Consumption.* Pp. 32. 1916. \$.02.

A simple pamphlet for laymen prepared by a committee of specialists.

DR. EDWARD O. OTIS. *Tuberculosis.* Pp. 326. 1915. \$1.25.

This is an authoritative book for the general public by an able physician, covering the entire ground of the cause, cure, and prevention of consumption. Particular attention to tuberculosis as it affects the individual and the family. Several illustrations.

S. E. TRACY. *Studies in Invalid Occupation.* Pp. 175. 1910. \$1.50.

Intended for those who care for the sick, primarily for nurses. Shows how simple tools and common or cheap materials may be used by invalids and convalescents to make useful and beautiful things. Numerous pictures and diagrams. No chapters with especial reference to convalescent consumptives, but they can find much of value in it.

## 218 Home Care of Consumptives

*Farmers' Bulletins Distributed Free of Charge  
by Department of Agriculture, Washington,  
D. C.*

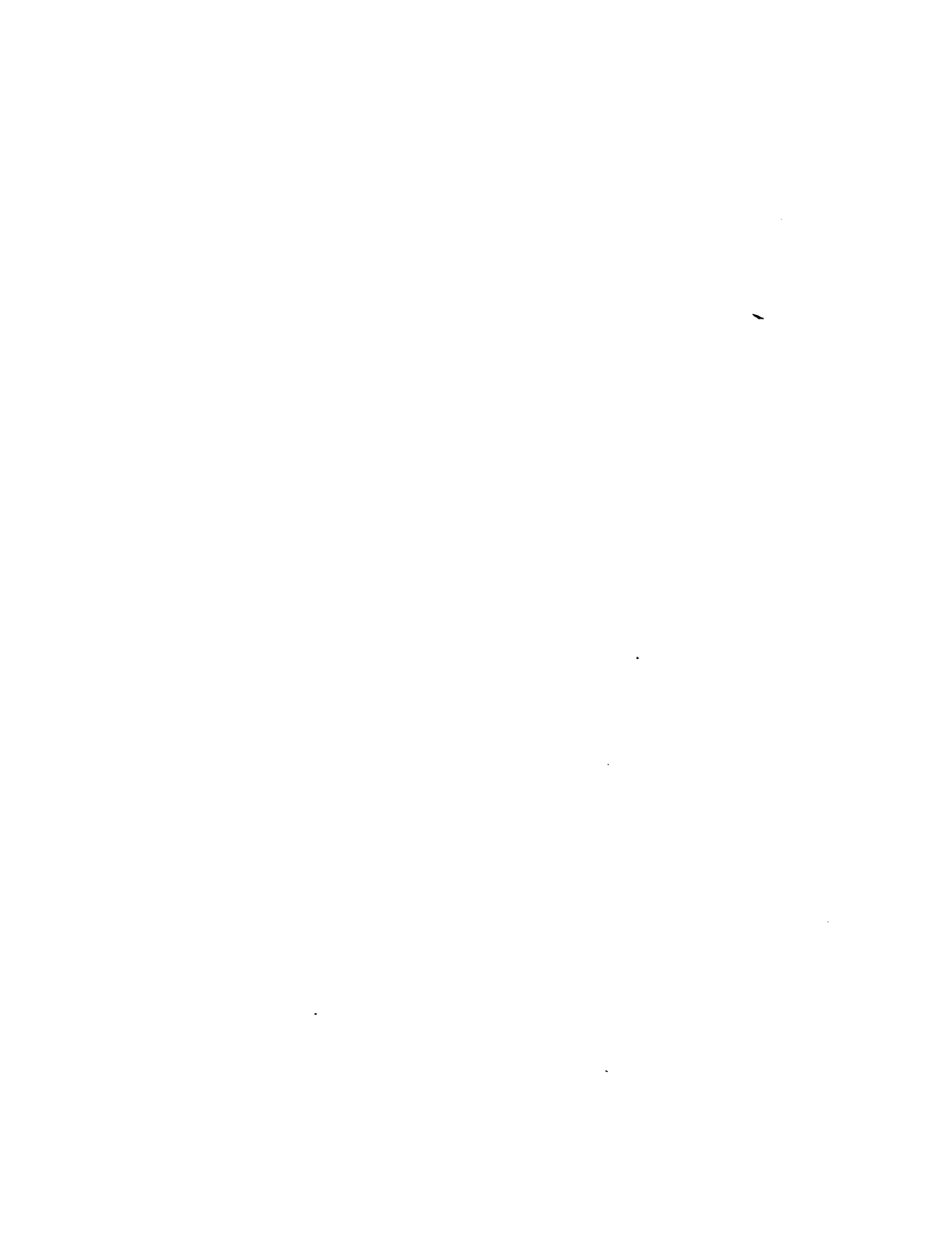
No.	
375—Care of Food in the Home.	Mary Hinman Abel.
142—Principles of Nutrition and Nutritive Value of Food.	W. O. Atwater, Ph.D.
256—Preparation of Vegetables for the Table.	Maria Parola.
249—Cereal Breakfast Foods.	Charles D. Woods and Harry Snyder.
295—Potatoes and Other Root Crops as Food.	C. F. Langworthy, Ph.D.
121—Beans, Peas, and Other Legumes as Food.	Mary Hinman Abel.
559—Use of Corn, Kafir, and Cowpeas in the Home.	C. F. Langworthy and Caroline L. Hunt.
389—Bread and Break Making.	Helen W. Atwater.
565—Corn Meal as a Food and Ways of Using it.	C. F. Langworthy and Caroline L. Hunt.
298—Food Value of Corn and Corn Products.	Charles D. Woods, D. Sc.
526—Mutton and its Value in the Diet.	C. F. Langworthy and Caroline L. Hunt.
34—Meats: Composition and Cooking.	Charles D. Woods.
391—Economical Use of Meat in the Home.	C. F. Langworthy and Caroline L. Hunt.
234—The Guinea Fowl and its Use as Food.	C. F. Langworthy, Ph.D.
182—Poultry as Food.	Helen W. Atwater.

## Appendix II

219

- |  |  |
|--|--|
| 128—Eggs and their Uses as Food.                         | C. F. Langworthy, Ph.D.                                |
| 85—Fish as Food.   | C. F. Langworthy, Ph.D.                                |
| 363—The Use of Milk as Food.                             | R. D. Milner, Ph.D.                                    |
| 413—The Care of Milk and Its Use in the Home.            | George M. Whitaker, L.A. Rogers, and Caroline L. Hunt. |
| 487—Cheese and its Economical Uses in the Diet.          | C. F. Langworthy and Caroline L. Hunt.                 |
| 653—Honey and its Uses in the Home.                      | Caroline L. Hunt and Helen W. Atwater.                 |
| 93—Sugar as Food.  | Mary Hinman Abel.                                      |
| 203—Canned Fruit, Preserves, and Jellies                 | Maria Parola.  |
| 293—Use of Fruit as Food.                                | C. F. Langworthy, Ph.D.                                |
| 175—Home Manufacture and Use of Unfermented Grape Juice. | George C. Husmann                                      |
| 359—Canning Vegetables in the Home.                      | J. F. Breascale.                                       |
| 426—Canning Peaches on the Farm.                         | H. P. Gould and W. F. Fletcher.                        |
| 332—Nuts and their Uses as Food.                         | M. E. Jaffa, M.S.                                      |





## INDEX

- Advice, sources of, 129-133  
Amusements, 112-115, 122, 123, 149-151  
Antiseptics, 97-101  
Appetite, 10, 55
- Back rests, 91, 92  
Baths, bed, 95, 96  
Baths, cold, 55, 56, 147  
Baths, hot, 54, 147  
Bedding, 76-78, 85, 87, 90-92, 98, 101-104  
Bedfast patient, care of, 88-96  
Beds, 89-93, 148, 149  
Bed sores, 93-95  
Bone, tuberculosis of, 11, 60, 65  
Book reviews, 210-217  
Bungalows, 82-84
- Carbolic acid, 99  
Chairs, 85, 142  
Chances of recovery, 4, 134-138  
Children, predisposed, 15, 117, 125  
Children, special risks of, 17, 67, 117  
Chloride of lime, 100  
Cleanliness, personal, 50-53, 97  
Climate, 32-38  
Clothing, 71-78, 85, 87, 90, 91, 98, 145-147, 149  
Coal-tar disinfectants, 101  
Comfort of patient, 78, 85-96

- Correspondence, 150
- Corrosive sublimate, 100
- Cough, 9, 10, 31, 60, 64, 151-154
- "Cure" defined, 5
  
- Diagnosis, 27, 126-128
- Diagnosis, attitude toward, 18
- Disinfection, 97-101
- Draughts, 45, 79, 95
  
- Exercise, 109-111, 139, 140, 144
  
- Fever, 10, 58, 110, 139, 141, 143
- Flies, 47, 48
- Food, 92, 93, 143-145, 162-198, 212-214, 218, 219
  - Amount needed, 164, 165
  - Cook books, 212-214, 218, 219
  - Cooking schedule, 165-167
  - Kinds needed, 162-164
  - Menus, 181-185
  - Reasons for cooking, 168-170
  - Recipes, 170-177, 185-198
  - Serving, 92, 93
- Formaldehyde, 46, 48, 98, 99, 105-107
- Fresh air, 70-87, 141-143
- Fumigation, 102-108, 130
  
- Germes, 8, 9, 11-14, 60
- Glands, tuberculosis of, 11
- Government bulletins, 218, 219
  
- Health department, 41, 48
- Hemorrhage, 10, 14
- House cleaning, 102-108
- House for patient, 39-42

Immunity, 16

Infection, 8, 11-13, 50, 60-67, 97, 102, 154

*Journal of the Outdoor Life*, 133, 210

Manufacturers of supplies, 199-209

Marriage of consumptives, 124, 125

Medicines, 30, 31, 145, 154

Mental attitude, 157-161

Milk, infection from, 66, 67

Mosquitoes, 49

Night sweats, 10, 58

Nuisances in neighbourhood, 40, 47, 48

Occupation for arrested patient, 112-115

Parenthood, 124, 125

Patient and family, 52, 116-123

Patient and physician, 18, 25-29, 156

Periodical medical examinations, 126-128

Predisposing conditions, 3, 15

Quack doctors, 27

Red Cross Seals, 131

Resistance, 16

Rest, 68, 69, 84-87, 140, 141

Room, 43-46, 78, 79, 147, 148

Rubber rings, 94

Rubs, 58, 59, 94, 147

Sanatoria, advantages, 23

Sanatoria, lack of, 1

Shacks, 82-84

- Sleeping porches, 79-82
- Sleeping tents, 79, 86
- Sputum, disposal of, 51, 60-65, 152-154
- Sunshine, 86, 101, 103
- Sweeping, proper methods of, 45, 56
- Symptoms, 9-11
  
- Teeth, care of, 50
- Tents, 86
- Trained nurse, 59, 89, 95, 130, 131
- Tubercles, 12
- Tuberculin, 16, 28, 31
  
- Ventilation, 43-45, 81
- Voice, 11, 151
  
- Water supply, 40, 41
- Weight, 10
- Window tents, 78, 148

*A Selection from the  
Catalogue of*

**G. P. PUTNAM'S SONS**



**Complete Catalogues sent  
on application**



# The Tuberculosis Nurse

By Ellen N. La Motte, R.N.

308 pages. 120 Illustrations. \$1.50 net.

Miss Lavinia L. Dock, author of *Materia Medica for Nurses*, etc., whose nursing and settlement work give her special authority as a judge of the value of the book, makes regarding *The Tuberculosis Nurse* the following comments:

"The book impresses myself and my associates as being an excellent—it is fair to say a masterly—piece of work. The author is a woman of unusual abilities and one could be fairly assured that a book from her would be well done. I think that her treatise should prove exceedingly valuable and useful to workers in the matters considered by her. It will undoubtedly be made of service by boards of managers who are directing crusades against tuberculosis and by nurses who are engaged in the work or who are in training for the work. Tuberculosis is important not only as a disease, but in its social aspects, and it is on this ground that the investigation of the subject is calling for such widespread attention. In its social relations it is to modern society what leprosy was to the communities of the Middle Ages. This fact will help to emphasize the importance of a book like Miss La Motte's, who has studied the subject from the point of view of preventive service."

New York **G. P. Putnam's Sons** London



# **Practical Nursing**

## **A Text-Book for Nurses**

**By Anna Caroline Maxwell**

**Superintendent of the Presbyterian Hospital School of Nursing  
and**

**Amy Elizabeth Pope**

**Formerly Instructor in the Presbyterian Hospital School of Nursing;  
Instructor in School of Nursing, St. Luke's Hospital, San  
Francisco, Cal.**

***Third Edition, Revised. Crown 8°. About 900  
pages. With 91 Illustrations. \$2.00.  
Postage extra***

Over 50,000 copies of *Practical Nursing* had been sold up to January 1st, 1914. This new edition has been entirely reset, revised, and enlarged, and contains over 50 per cent. more material than the previous editions. An important feature of the new edition is, that the authors have not confined themselves to one method of treatment where experience has shown that other methods may be more effective in certain cases. Detailed instructions have been given, thus bringing the book in line with the latest developments in practical nursing.

---

**G. P. Putnam's Sons**

**New York**

**London**

# A Medical Dictionary for Nurses

Giving the Definition, Pronunciation, and Derivation  
of the principal terms used in medicine, together  
with supplementary tables of weights,  
measures, chemical symbols, etc.  
arranged with special reference to  
use by the nursing profession

By Amy E. Pope

Formerly Instructor in the Presbyterian Hospital School of  
Nursing

Author of "Anatomy and Physiology for Nurses," etc.

12°. Illustrated. 288 pages. \$1.00

In full flexible Morocco, Thumb Index. \$1.60

No one could be better fitted to produce this book, filling a long-felt want, than Miss Pope, because of her large practical experience as a nurse, instructor, and author. Without question this volume must quickly be recognized as indispensable to the students of her great profession.

*All Booksellers*

NEW YORK  
2-4-6  
W. 45th St.

G. P. Putnam's Sons 24

LONDON  
Bedford St.  
Strand

"I consider it the best I have seen and shall recommend its use in our school."—*Kate A. Sanborn, Supt. of Training School for Nurses, St. Vincent's Hospital.*

# **Essentials of Dietetics**

## **In Health and Disease**

**A Text-Book for Nurses and a Practical Dietary  
Guide for the Household**

**By AMY ELIZABETH POPE, Author, with  
ANNA CAROLINE MAXWELL**

**of "Practical Nursing" and Instructor in the Presbyterian  
Hospital School of Nursing**

*and*

**MARY L. CARPENTER**

**Director of Domestic Science in the Public Schools  
Saratoga Springs, N. Y.**

*Crown 8vo. Illustrated. \$1.00 net*

*Essentials of Dietetics* is primarily a text-book, intended to facilitate the teaching of dietetics in schools of nursing. Its aim is to furnish nurses with such information as is indispensable, and can be assimilated in the time given to the study of dietetics in the nursing-school curriculum. It is also adapted to use as a dietary guide for the home. At least one-third of the women who enter the larger schools of nursing do so with the desire of being prepared to take charge of hospitals or to do settlement work, and in both these branches of the nursing profession hardly any one thing is more important than knowing how to direct the buying, preservation, cooking, and serving of food. To do this intelligently it is absolutely necessary to have some knowledge of the chemistry of foods, of the special uses of the various food principles to the body, of the proportions in which they are contained in the different foods, and of the effect on them of acids, heat, salt, digestive ferments, etc.

**G. P. PUTNAM'S SONS**

**NEW YORK**

**LONDON**



11



---

LANE MEDICAL LIBRARY

---

To avoid fine, this book should be returned on  
or before the date last stamped below.

---

JAN 25 1966		
-------------	--	--

5/10

L311.3 French, R.L. 78486  
F87 Home care of  
1916 consumptives.

NAME \_\_\_\_\_

DATE DUE

FURIED.



